K&D Factory Service Inc. Presents:

CVap WINSTON INDUSTRIES Collectramatic

Commodore Thermailizer
Parts Manual

Breader / Sifter
Parts Manual

Hot Food Merchandiser
Parts Manual

HBA0/5 "D" Series

Parts Manual

HBA0/5 "N" Series

Parts Manual

HBK, L, M, 8, 0 or 5 "D" Series
Parts Manual

PF46C / PF56C

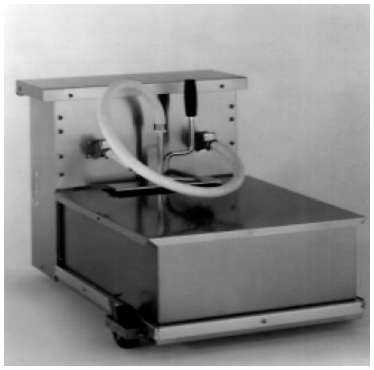
Parts Manual

Collectramatic Series Fryers
"P" Control Parts Manual

"P" Control International Manual

Surface Mount "S" Manual

8 Channel Model W/4 or 6 Heads



Shortening Filter

Parts Manual

International Parts Manual

Model F662A

Model 302A02E20 Manual

HA4502 Holding Cabinet

Parts Manual

CVAP HA45 Holding Cabinet (Non Surface Mounted Controls)

Parts Manual

International Parts Manual

CVAP HA45 Holding Cabinet (Surface Mounted Controls)

Parts Manual

CVAP CC, CB, CG
(Differential Controls)

Parts Maual

CA75

Parts Manual

HB35

"D" Models Parts Manual

"S" Models Parts Manual

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Commodore Thermalizer

Parts Identification Manual

For service information call 1-800-234-5286

Lit. #4275T155 – 7/98

Commodore Thermalizer
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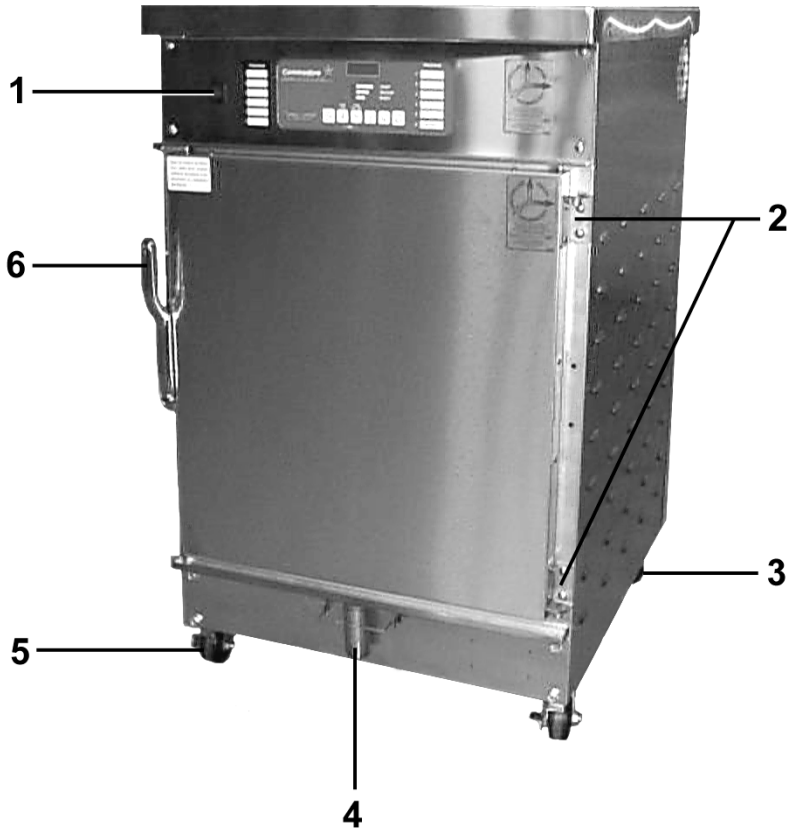
Commodore Thermalizer

Parts Identification

Note: See pages 7-8 for descriptions and order numbers.



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Commodore Thermalizer

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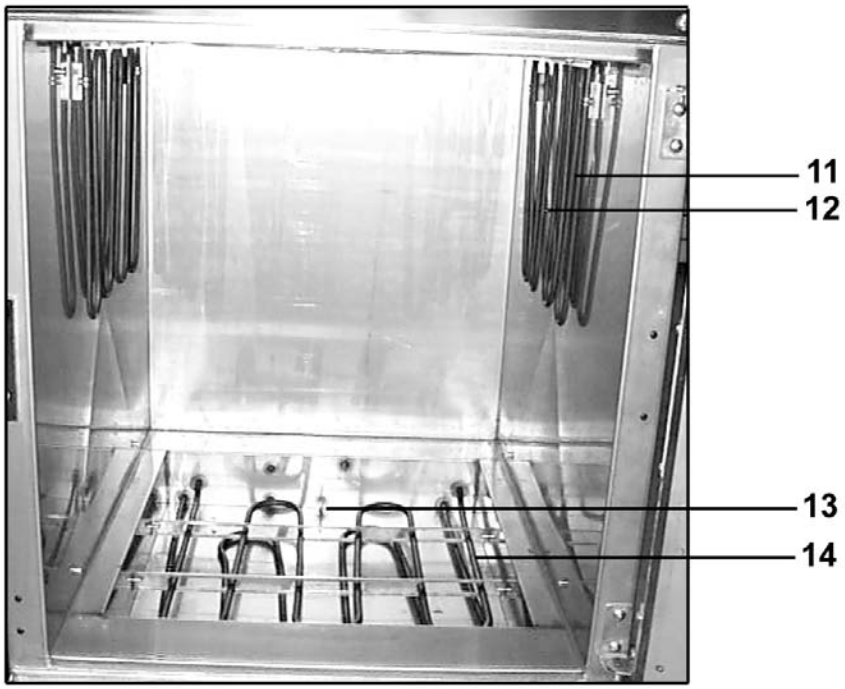

Commodore Thermalizer

Parts Identification

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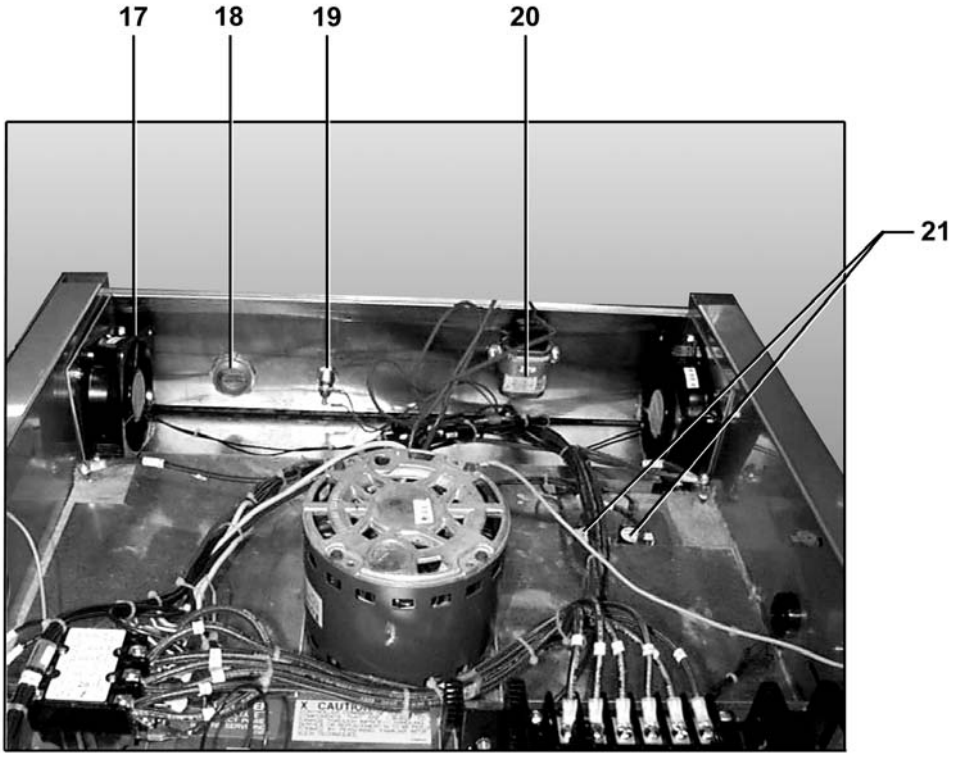
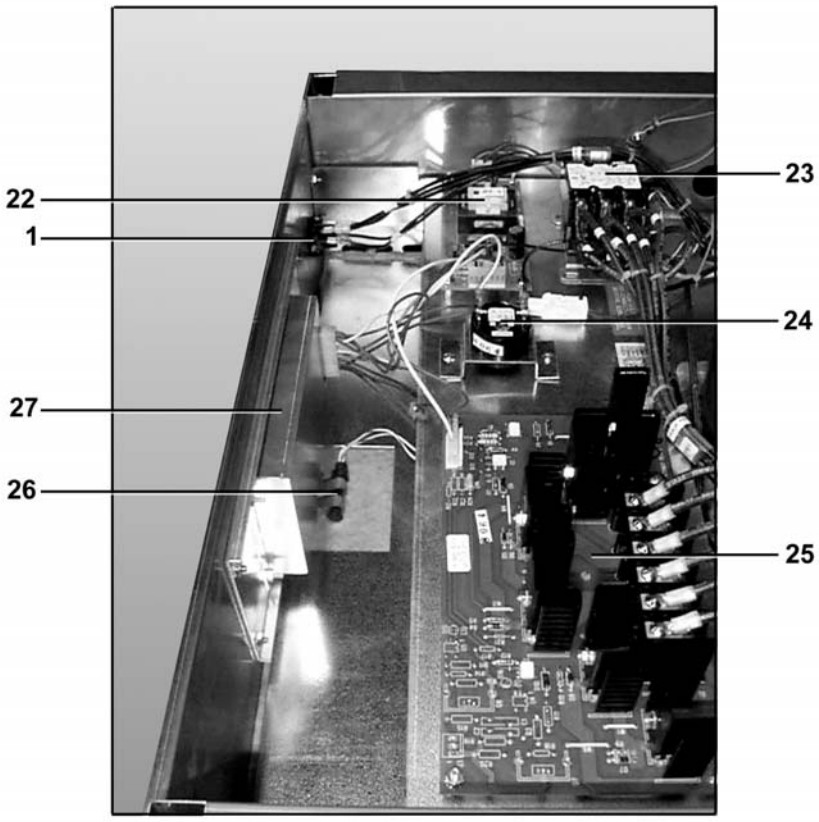
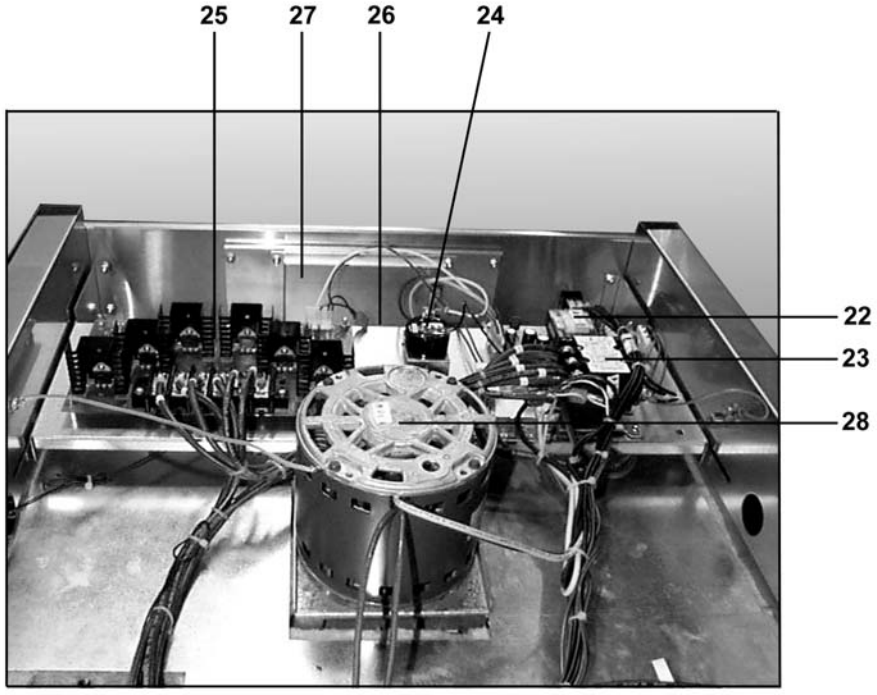


Commodore Thermalizer

Parts Identification

Note: See pages 7-8 for descriptions and order numbers.





Commodore Thermalizer

Parts Identification

Photo Reference Number	Part Description	Order Number
1	Power Switch	
	Rocker Type	PS2304
	Toggle Type	PS1529
2	Hinge Kit	PS2116
3	Non-locking Caster	PS2147
4	Drip Cup & Retainer	PS2182
5	Locking Caster	PS2146
6	Handle	PS1774
7	Door Gasket	PS2150
8	Flue	*REF. ONLY*
9	Removable Shelf	PS2305
10	Evaporator Cover	PS2365
11	Air Heater	PS2368
12	Air Probe	PS2178
13	Water Probe	PS2177
14	Water Heater	
	Top Element	PS2367
	Bottom Element	PS2366
15	Circulating Fan Wheel (Hidden)	PS2371
16	Circulating Fan Cover	PS2370

17	**Cooling Fan**	**PS2098**
18	**Power Cord Strain Relief**	***REF. ONLY***
19	**Program Lock Key Switch**	***REF. ONLY***
20	**Circulation Fan Motor Starting Capacitor**	***REF. ONLY***
21	**High Limit Thermostat**	**PS2369**
22	**Transformer Board**	**PS2172**
23	**Contactor (Magnetic)**	**PS1007**
24	**Buzzer Assembly**	**PS1589**
25	**Power Board**	**PS2354**
26	**Door Switch**	**PS2372**
27	**Control Board**	**PS2203**
28	**Circulating Fan Motor**	**PS2119**

Winston
Breader/Sifter
Parts Identification Manual

WINSTON PRODUCTS CO.
2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

Lit. #4275R85 - 9/96

WINSTON BREADER/SIFTER

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WINSTON BREADER/SIFTER

Parts Identification

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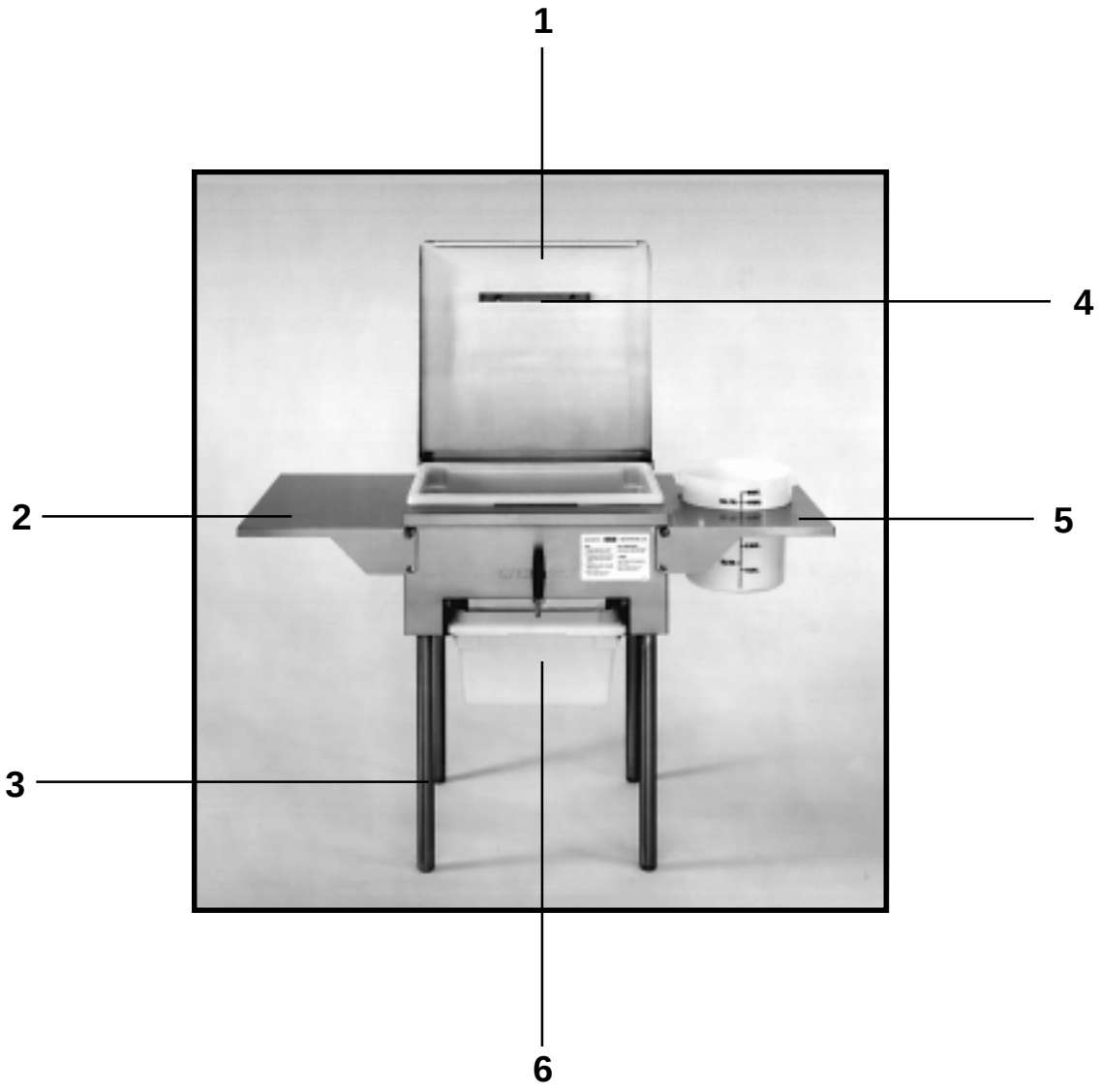

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WINSTON BREADER/SIFTER

Parts Identification

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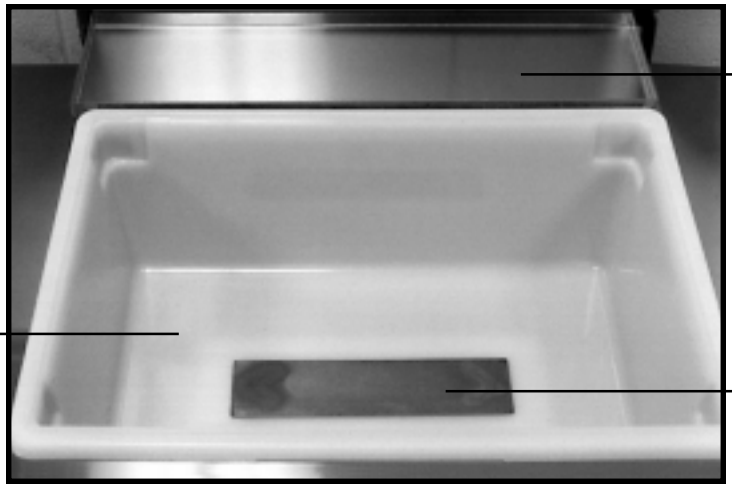

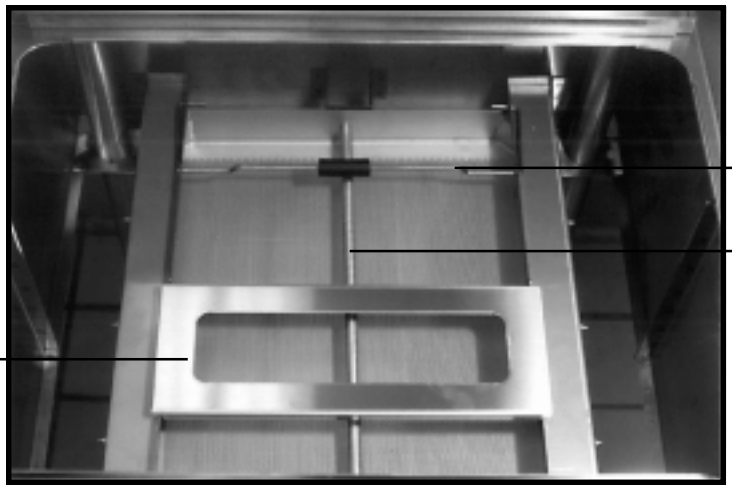

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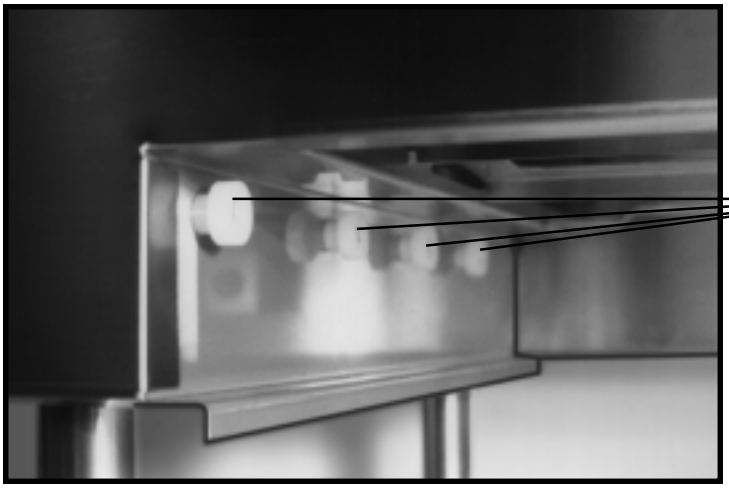

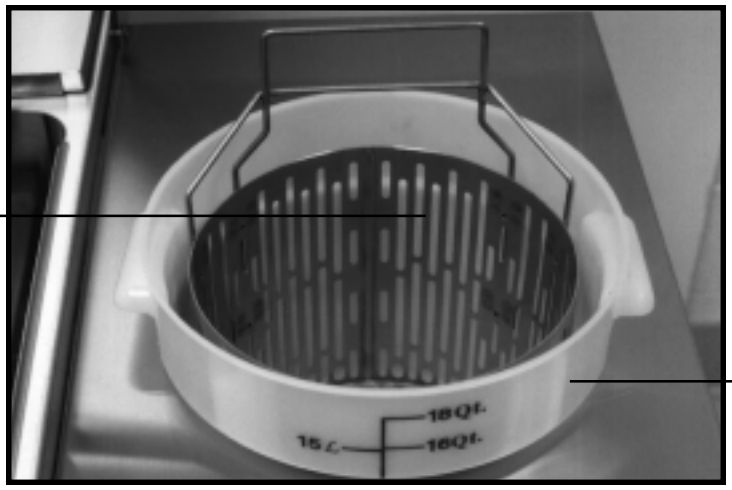

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WINSTON BREADER/SIFTER
Parts Identification

Photo Reference Number	Part Description	Order Number
1	Cover	Ref. Only
2	Folding Shelf w/o Hole	HPS1192
3	Leg Assembly *(33")*	HPS1142/2
4	Basket Hanger	HPS1390
5	Folding Shelf w/ Hole	HPS1200
6	Lug w/o Hole	HPS1115
7	Cover Support Tray	HPS1341
8	Lug w/ Hole	HPS1317
9	Lug Hole Cover	HPS1186
10	Lug Support	HPS1326
11	Sifter Limiter	HPS1705
12	Sifter Assembly	HPS1185
13	Sifter Assembly Rollers	HPS1315/2
14	Dip Basket	HPS1292
15	Dip Bucket, Plastic	HPS1581

NOTE: See pages 1 - 3 for Photo Reference

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Winston
Hot Foods Merchandiser
Parts Identification Manual

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2345 Carton Drive
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(800) 234-5286
(502) 495-5400

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WINSTON HOT FOODS MERCHANDISER

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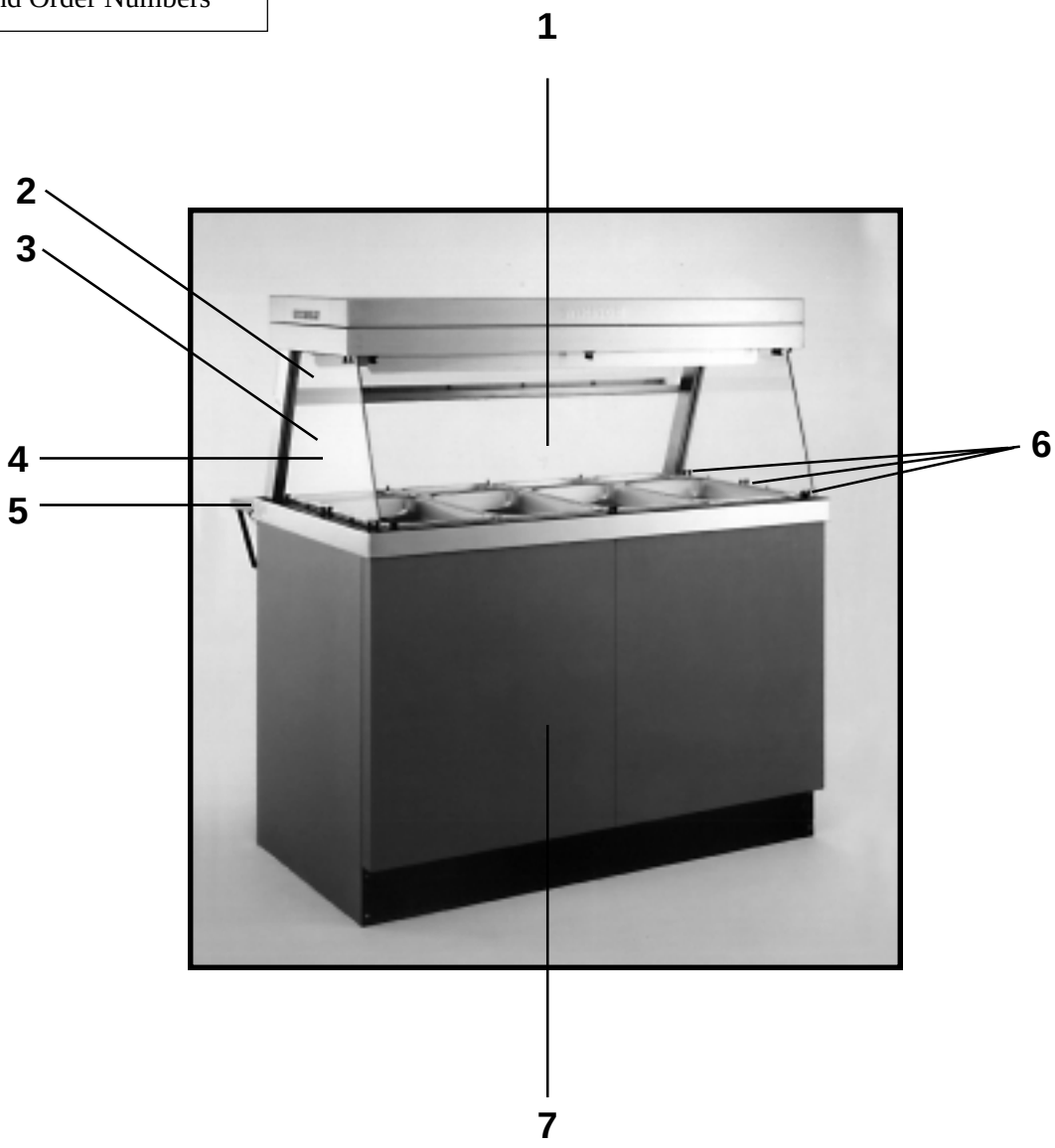
WINSTON HOT FOODS MERCHANDISER

Parts Identification

NOTE: See page 5 - 6
for Parts Descriptions
and Order Numbers



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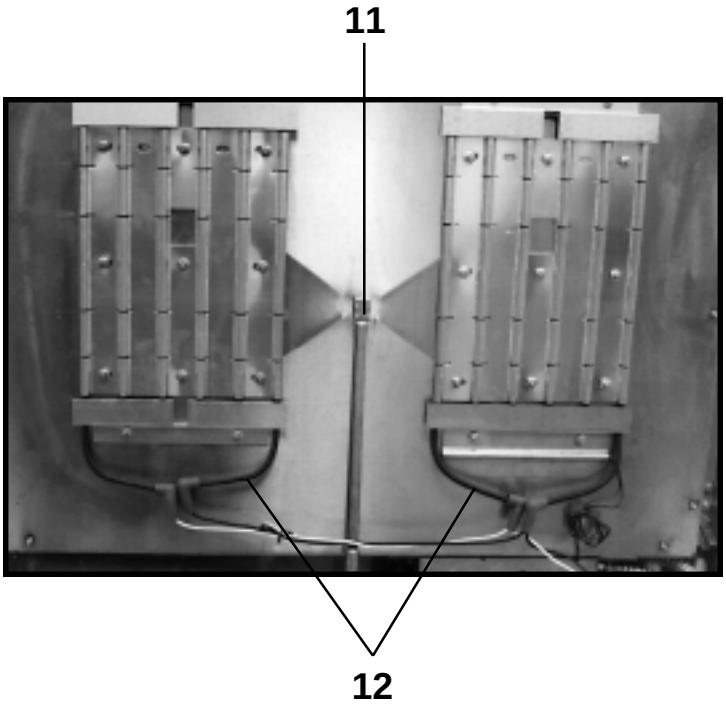

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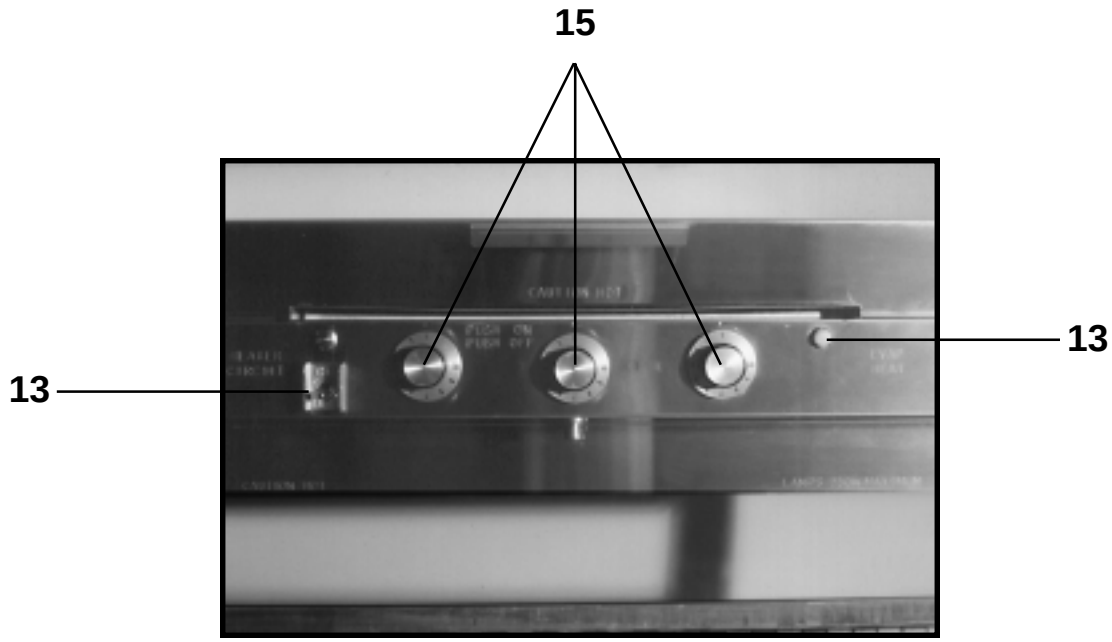

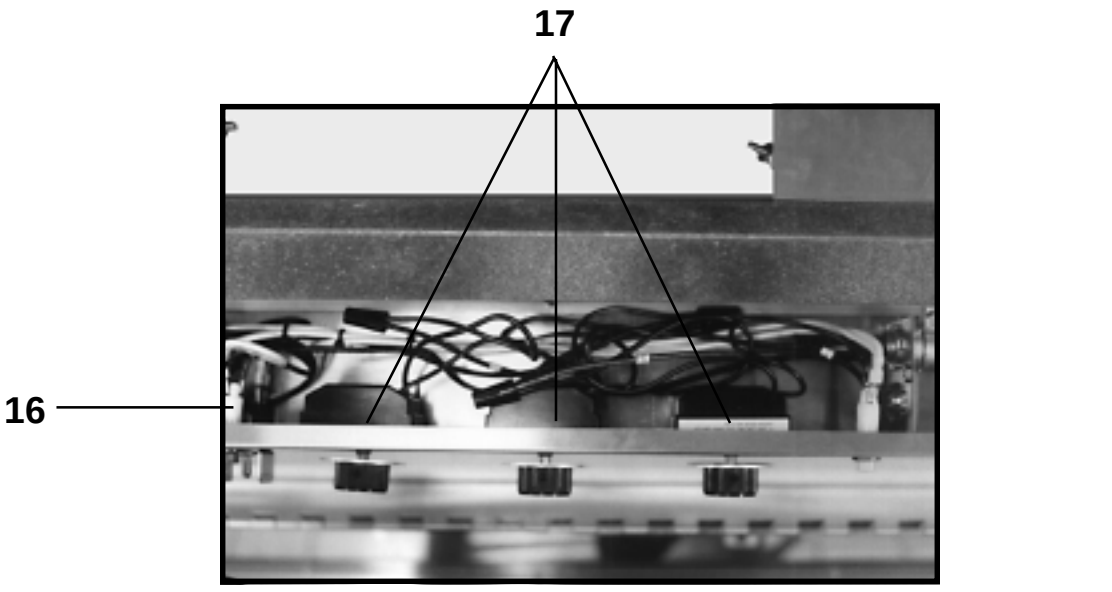

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WINSTON HOT FOODS MERCHANDISER

Parts Identification

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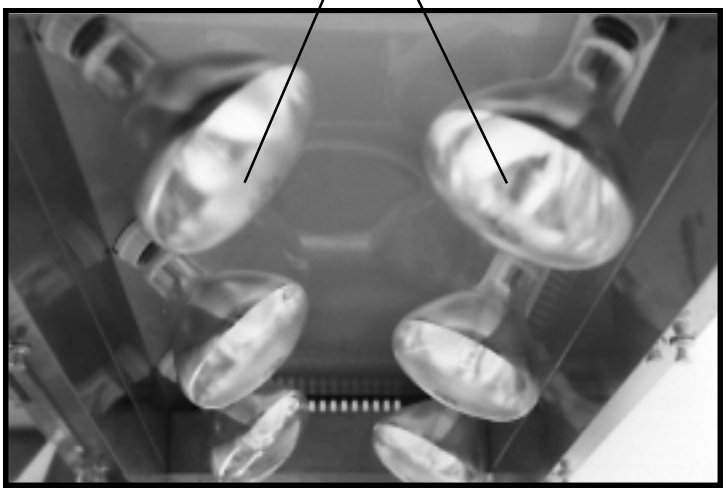

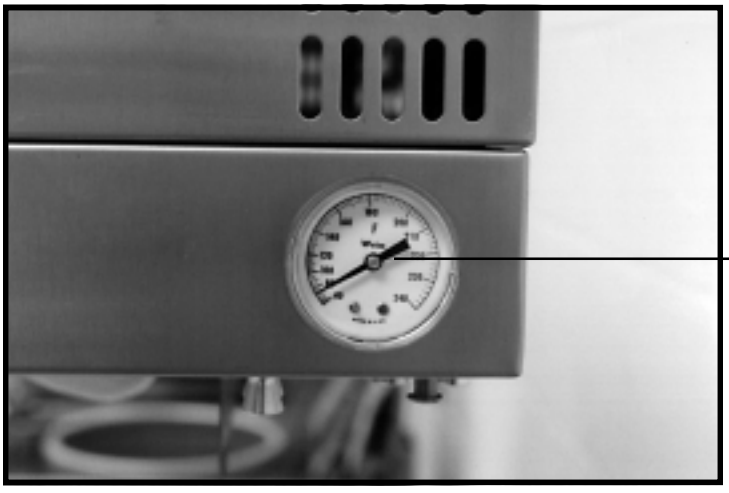

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WINSTON HOT FOODS MERCHANDISER
Parts Identification

Photo Reference Number	Part Description	Order Number
1	**Front Glass *(2 Pan)***	**HPS1612**
	Front Glass *(3 Pan)*	**HPS1611**
	Front Glass *(4 Pan)*	**HPS1610**
	Front Glass *(5 Pan)*	**HPS1840**
2	**Back Glass *(2 Pan)***	**HPS1613**
	Back Glass *(3 Pan)*	**HPS1614**
	Back Glass *(4 Pan)*	**HPS1615**
	Back Glass *(5 Pan)*	**HPS1839**
3	**Door Assembly *(2 Pan)***	**HPS1597**
	Door Assembly *(3 Pan)*	**HPS1596**
	Door Assembly *(4 Pan-Left Side)*	**HPS2234**
	Door Assembly *(4 Pan-Right Side)*	**HPS2235**
	Door Assembly *(5 Pan-Left Side)*	**HPS2236**
	Door Assembly *(5 Pan-Right Side)*	**HPS2237**
	Note: 4 & 5 Pan models equipped w/ split doors	
4	**Side Glass *(All Models)***	**HPS1609**
5	**SS Serving Shelf *(2 Pan)***	**HPS1381**
	SS Serving Shelf *(3 Pan)*	**HPS1382**
	SS Serving Shelf *(4 Pan)*	**HPS1383**
	SS Serving Shelf *(5 Pan)*	**HPS1794**
6	**Glass Tabs**	**HPS1535/6**
7	**Floor Base Ass. *(Mandarin Red) (2 Pan)***	**HPS1370**
	Floor Base Ass. *(Mandarin Red) (3 Pan)*	**HPS1373**
	Floor Base Ass. *(Mandarin Red) (4 Pan)*	**HPS1376**
	Floor Base Ass. *(Mandarin Red) (5 Pan)*	**HPS1793**

WINSTON HOT FOODS MERCHANDISER
Parts Identification

Photo Reference Number	Part Description	Order Number
8	Short Adapter	HPS1513
9	Long Adapter *(2, 3, 4 Pan)*	HPS1515
	Long Adapter *(5 Pan)*	HPS1968
10	Drain Cap	HPS1654
11	Drain Pipe	HPS1833
12	Water Heaters	HPS1437
13	Switch Guard	HPS1086
14	Evaporator Heat Lamp	HPS1103
15	Dimmer Switch Dials	HPS1250
16	Power Switch	HPS1529
17	Dimmer Switches	HPS1528
18	Heat Lamps *(250 W, 120 Volt Infra-Red)*	*Ref. Only*
19	Thermometer	HPS1827

NOTE: See pages 1 - 4 for Photo Reference

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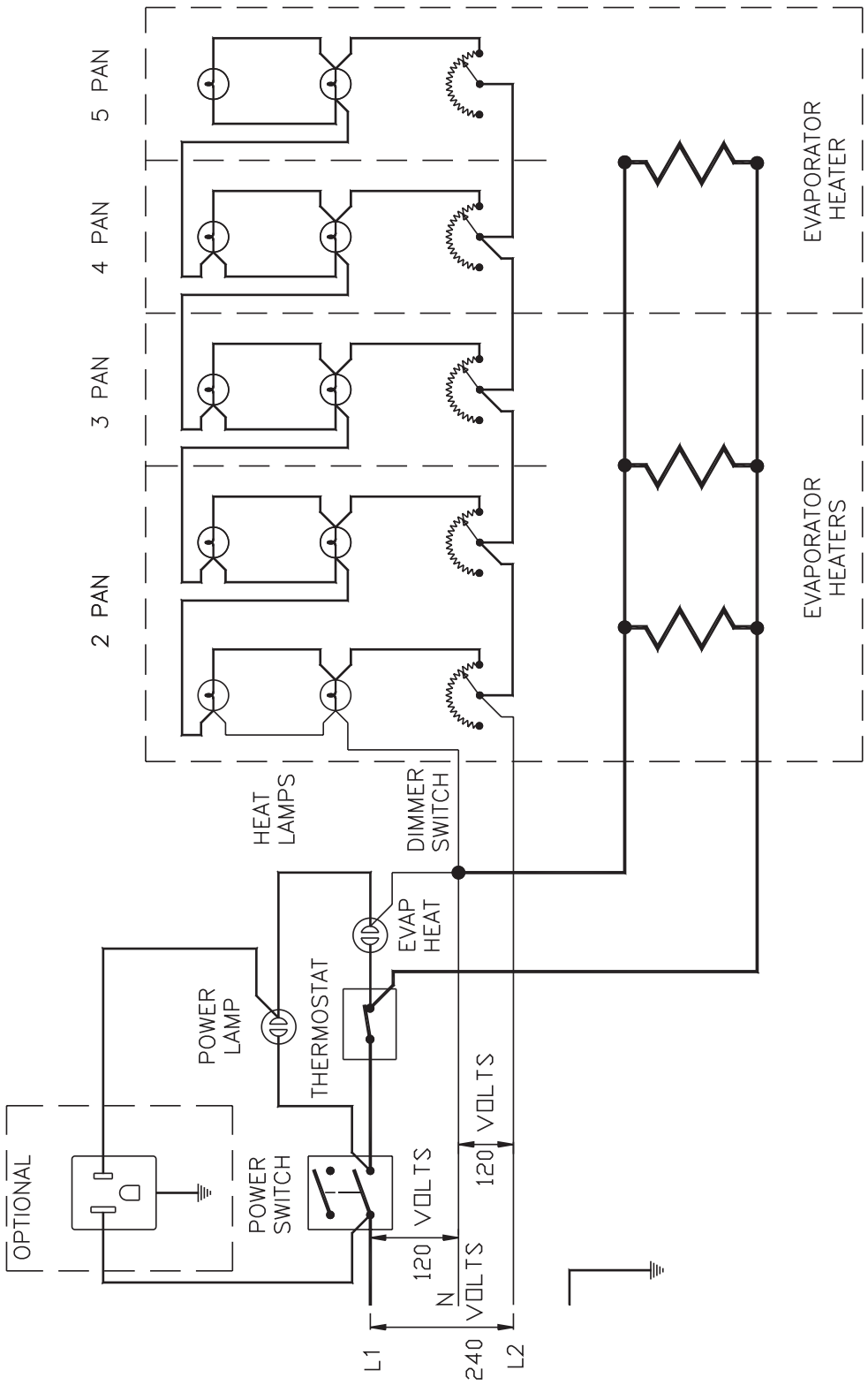
WINSTON HOT FOODS MERCHANDISER

Wiring Schematic



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HBA0/5
‘D’ SERIES

Parts Identification Manual

HBA5D2 SHOWN

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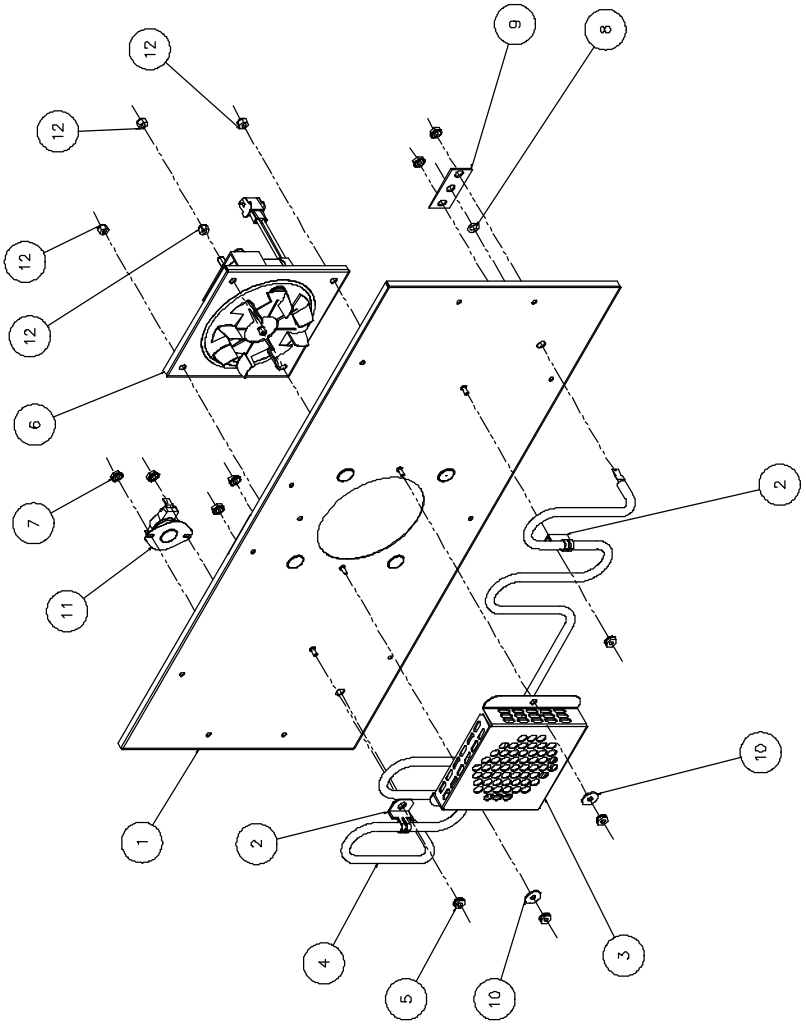
WINSTON CVAP MODEL HBA0/5D SERIES

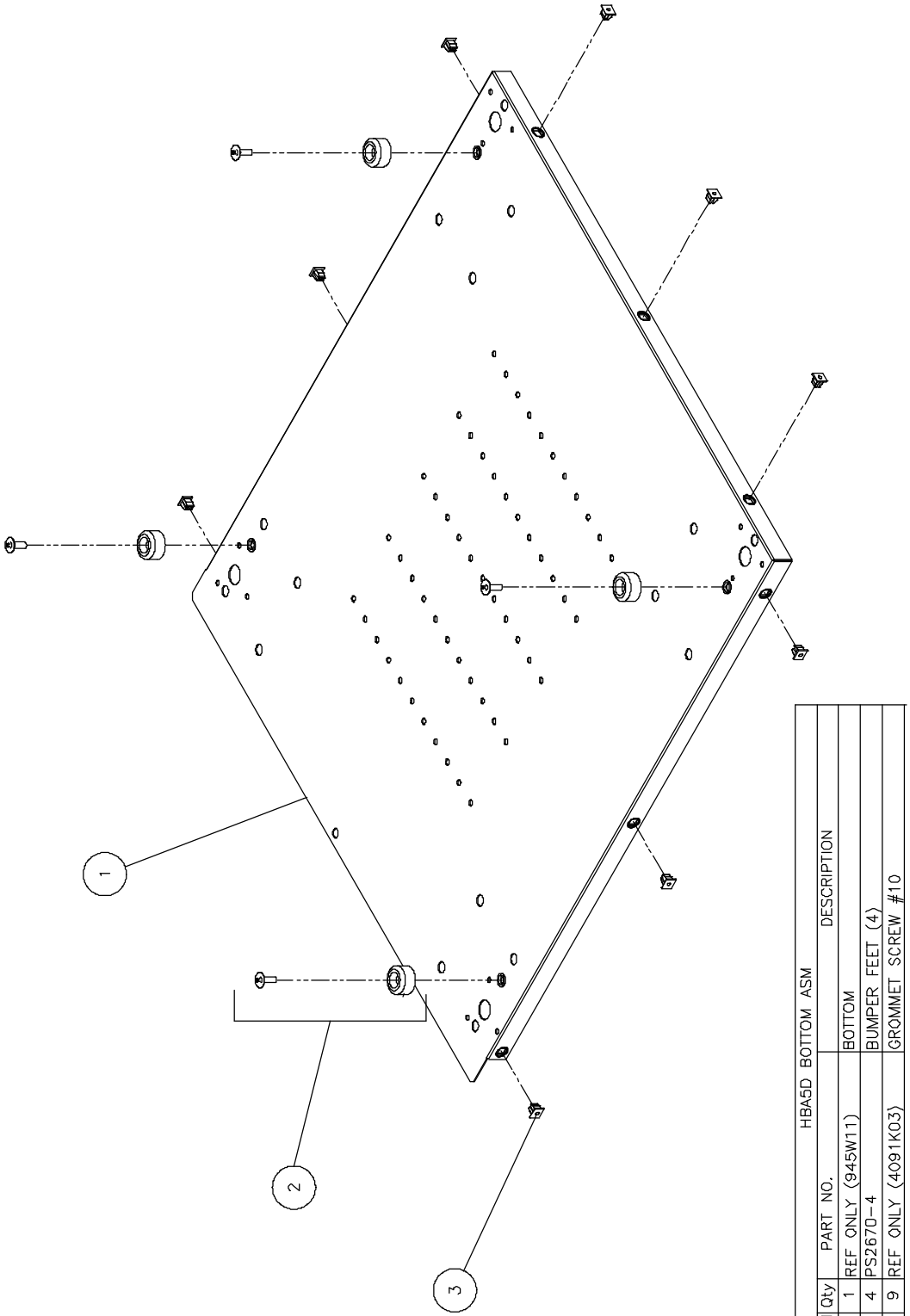
BACK INTERIOR ASSEMBLY

HBA5D BACK INTERIOR ASM

SYM.	QTY	PART NO	DESCRIPTION
1	1	REF ONLY (963X10)	CAVITY BACK INT WELD
2	2	REF ONLY (695M01)	CLAMP HEATER
3	1	REF ONLY (60711W01)	COVER FAN
4	1	PS2197	HEATER 120V 840W - BEFORE 8/26/02
	1	PS2705	HEATER 120V 840W - AFTER 8/26/02
5	4	PS1233-6	NUT HEX #10-32 S.S.
6	1	PS2704	MOTOR FAN ASM
7	10	REF ONLY (4098K29)	NUT KEPS #10-32
8	2	PS1784-3	O-RING .301 ID x 446 OD
9	2	REF ONLY (204M01)	RETAINER O-RING HEATER
10	2	REF ONLY (1122N01)	WASHER
11	1	PS2199	THERMOSTAT 250
12	4	REF ONLY (4098N53)	NUT NYLON INSERT #10-32



BOTTOM ASSEMBLY

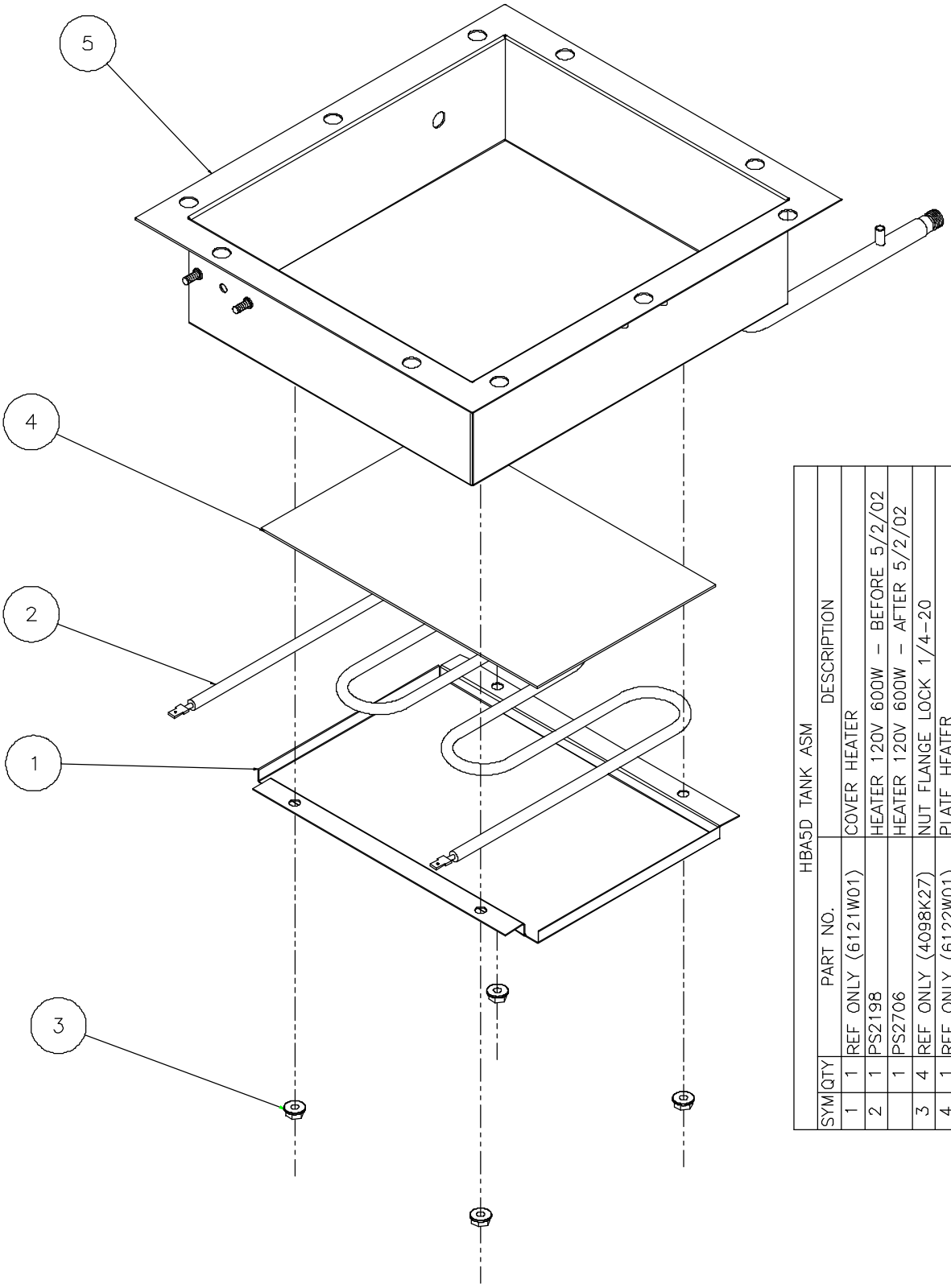


HBA5D BOTTOM ASM

SYM	Qty	PART NO.	DESCRIPTION
1	1	REF ONLY (945W11)	BOTTOM
2	4	PS267D-4	BUMPER FEET (4)
3	9	REF ONLY (4091K03)	GROMMET SCREW #10

WINSTON CVAP MODEL HBA0/5D SERIES

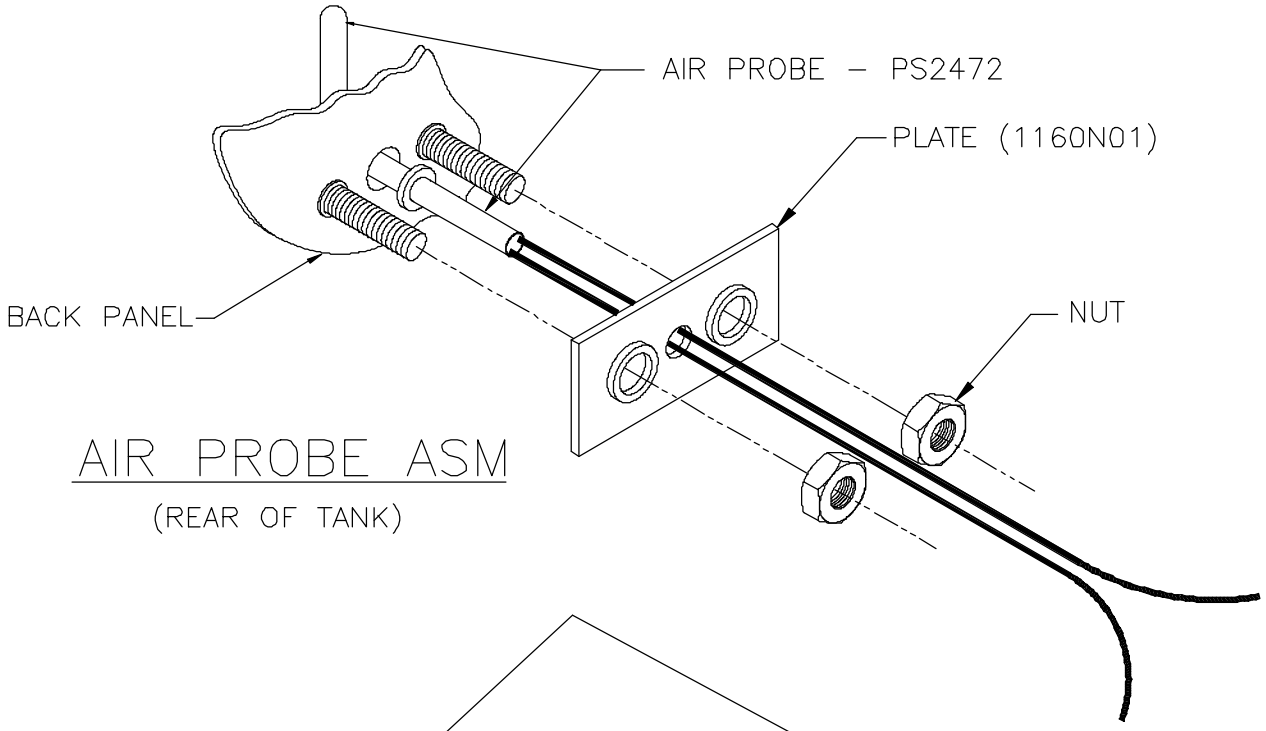
TANK ASSEMBLY

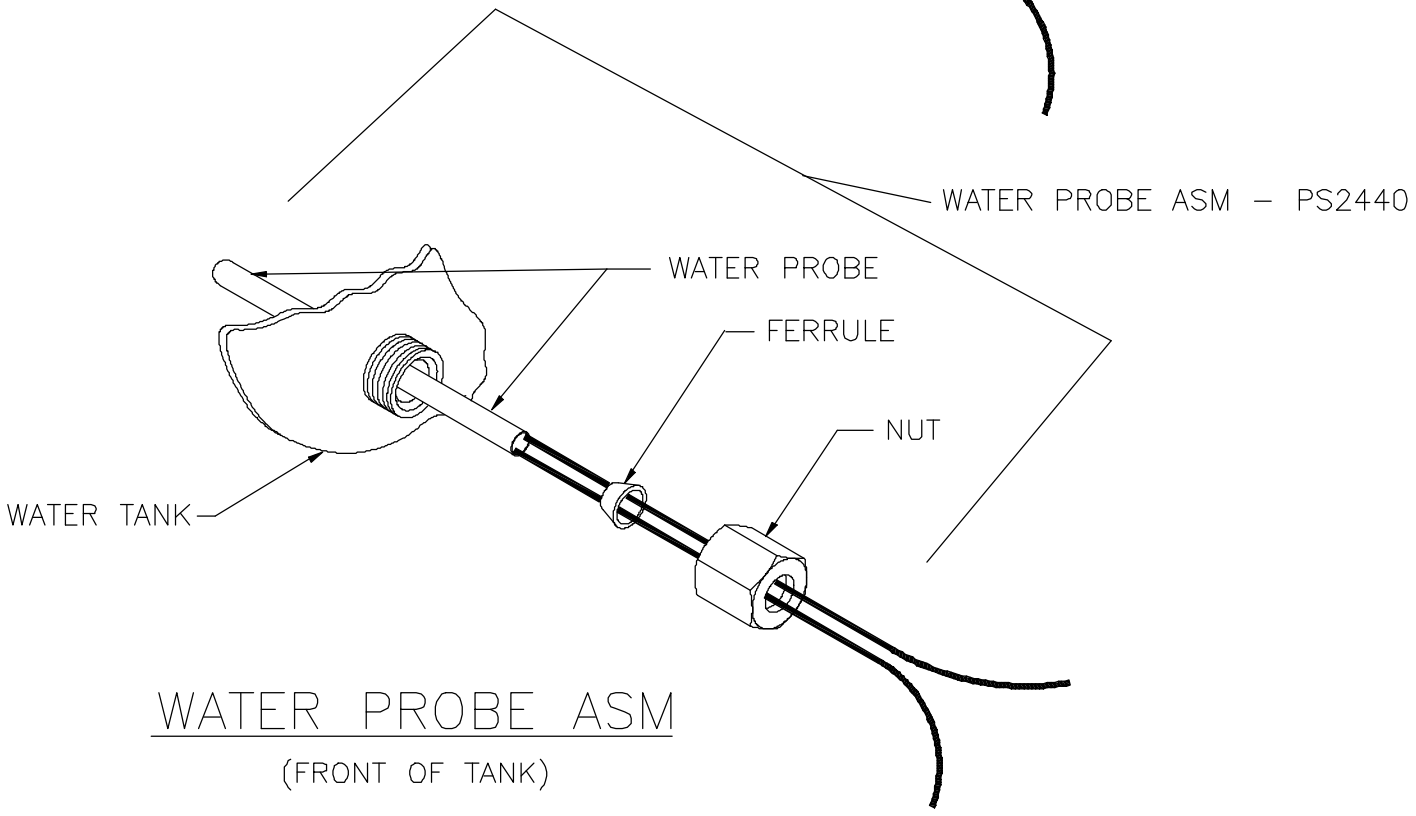


HBA5D TANK ASM

SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (6121W01)	COVER HEATER
2	1	PS2198	HEATER 120V 600W - BEFORE 5/2/02
	1	PS2706	HEATER 120V 600W - AFTER 5/2/02
3	4	REF ONLY (4098K27)	NUT FLANGE LOCK 1/4-20
4	1	REF ONLY (6122W01)	PLATE HEATER
5	1	REF ONLY (965U08)	TANK WELD

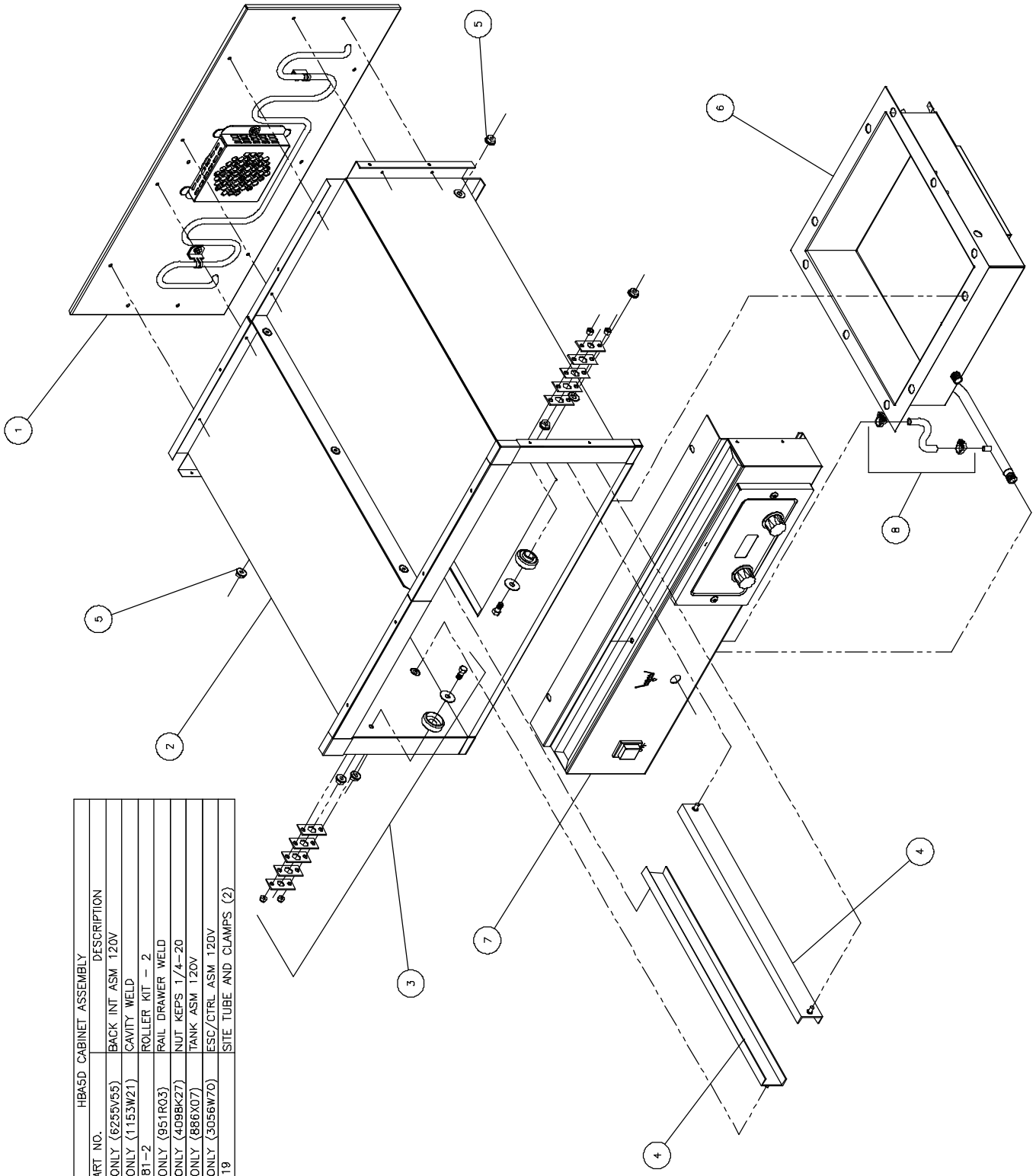
PROBE ASSEMBLIES





WINSTON CVAP MODEL HBA0/5D SERIES

CABINET ASSEMBLY



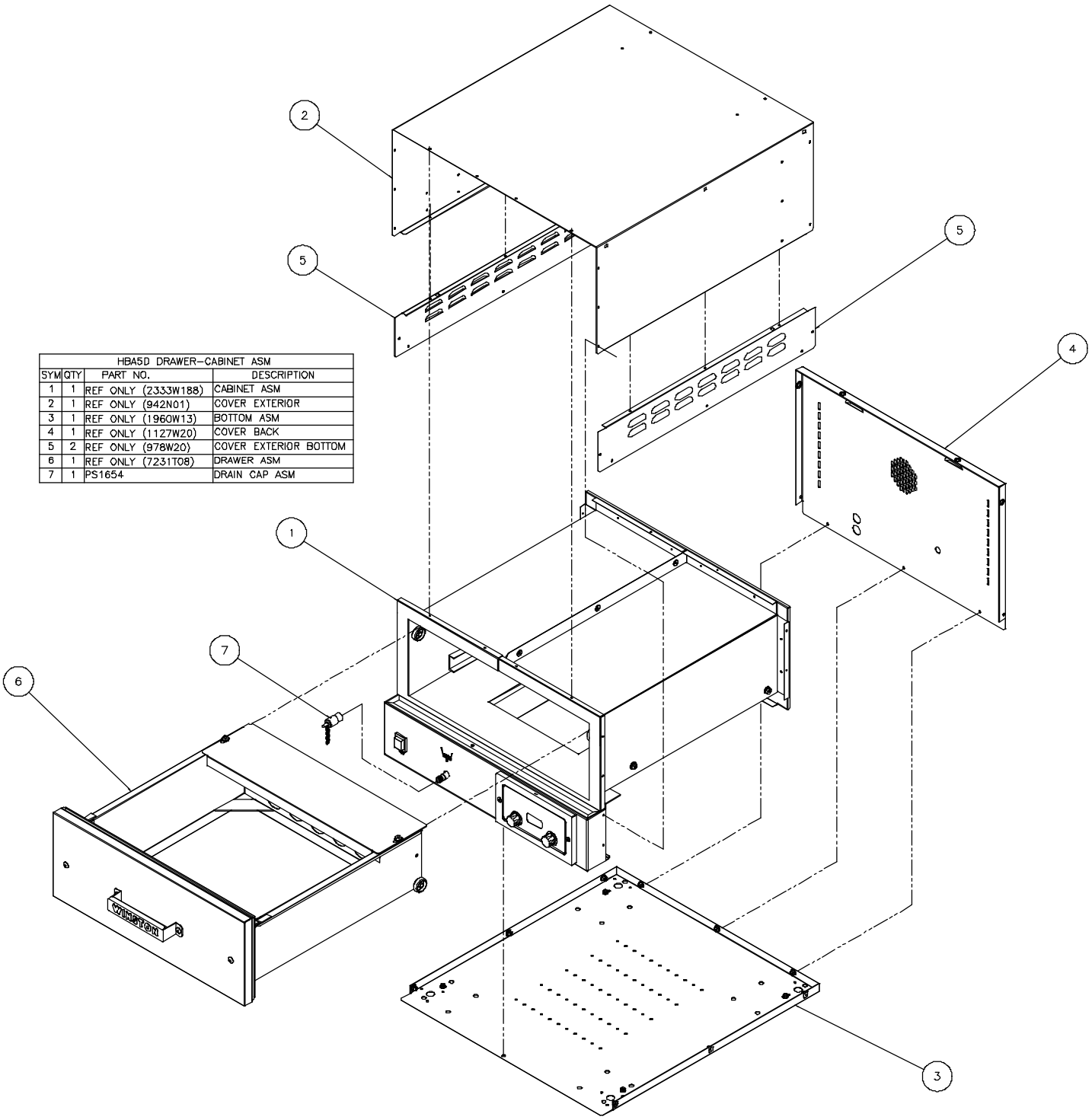
HBA5D CABINET ASSEMBLY

SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (6255V55)	BACK INT ASM 120V
2	1	REF ONLY (1153W21)	CAVITY WELD
3	2	PS2181-2	ROLLER KIT - 2
4	2	REF ONLY (951R03)	RAIL DRAWER WELD
5	2	REF ONLY (4098K27)	NUT KEPS 1/4-20
6	1	REF ONLY (886X07)	TANK ASM 120V
7	1	REF ONLY (3056W70)	ESC/CTRL ASM 120V
8	1	PS2319	SITE TUBE AND CLAMPS (2)

WINSTON CVAP MODEL HBA0/5D SERIES

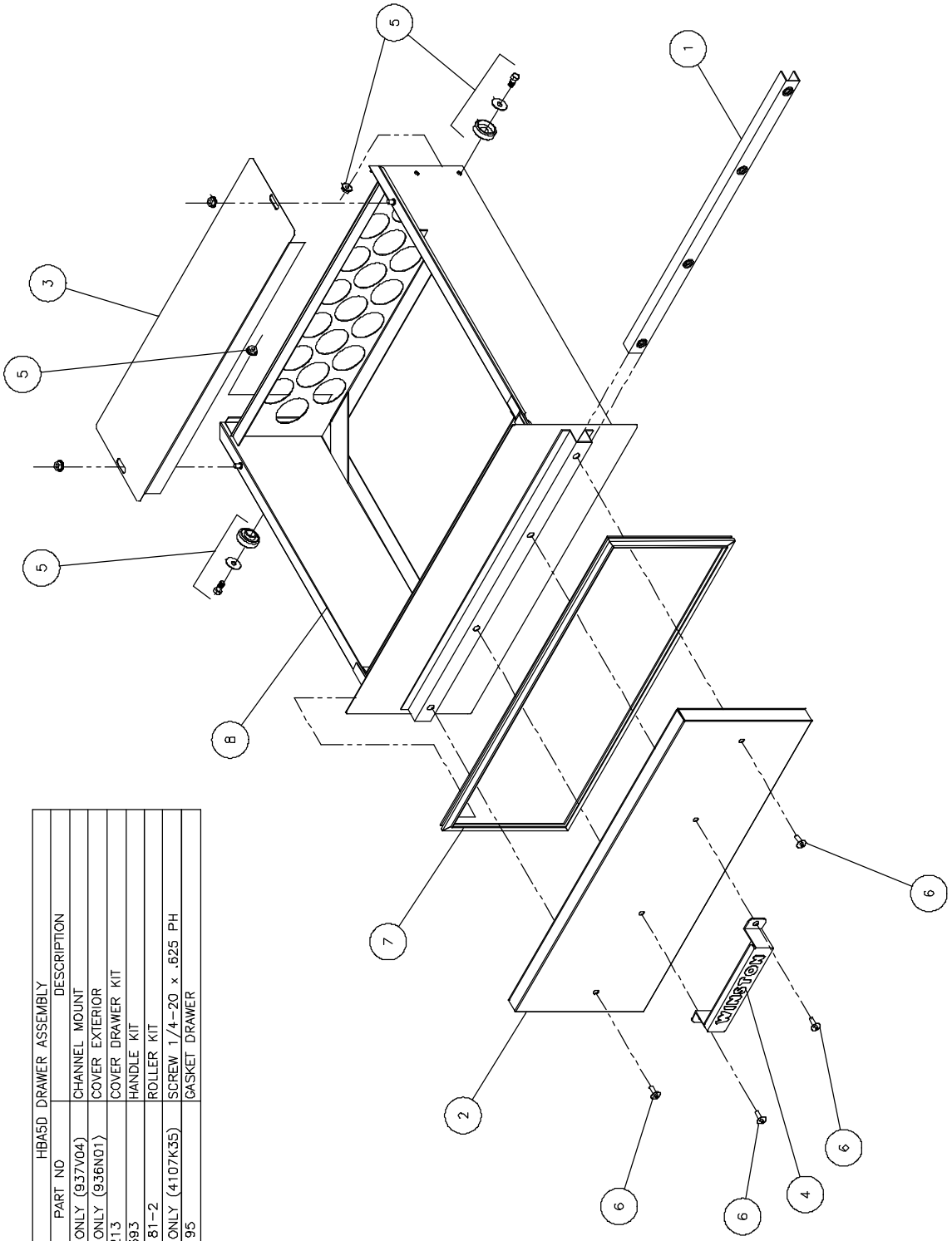
DRAWER CABINET ASSEMBLY

HBA5D DRAWER-CABINET ASM			
SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (2333W188)	CABINET ASM
2	1	REF ONLY (942N01)	COVER EXTERIOR
3	1	REF ONLY (1960W13)	BOTTOM ASM
4	1	REF ONLY (1127W20)	COVER BACK
5	2	REF ONLY (978W20)	COVER EXTERIOR BOTTOM
6	1	REF ONLY (7231T08)	DRAWER ASM
7	1	PS1654	DRAIN CAP ASM



WINSTON CVAP MODEL HBA0/5D SERIES

DRAWER ASSEMBLY

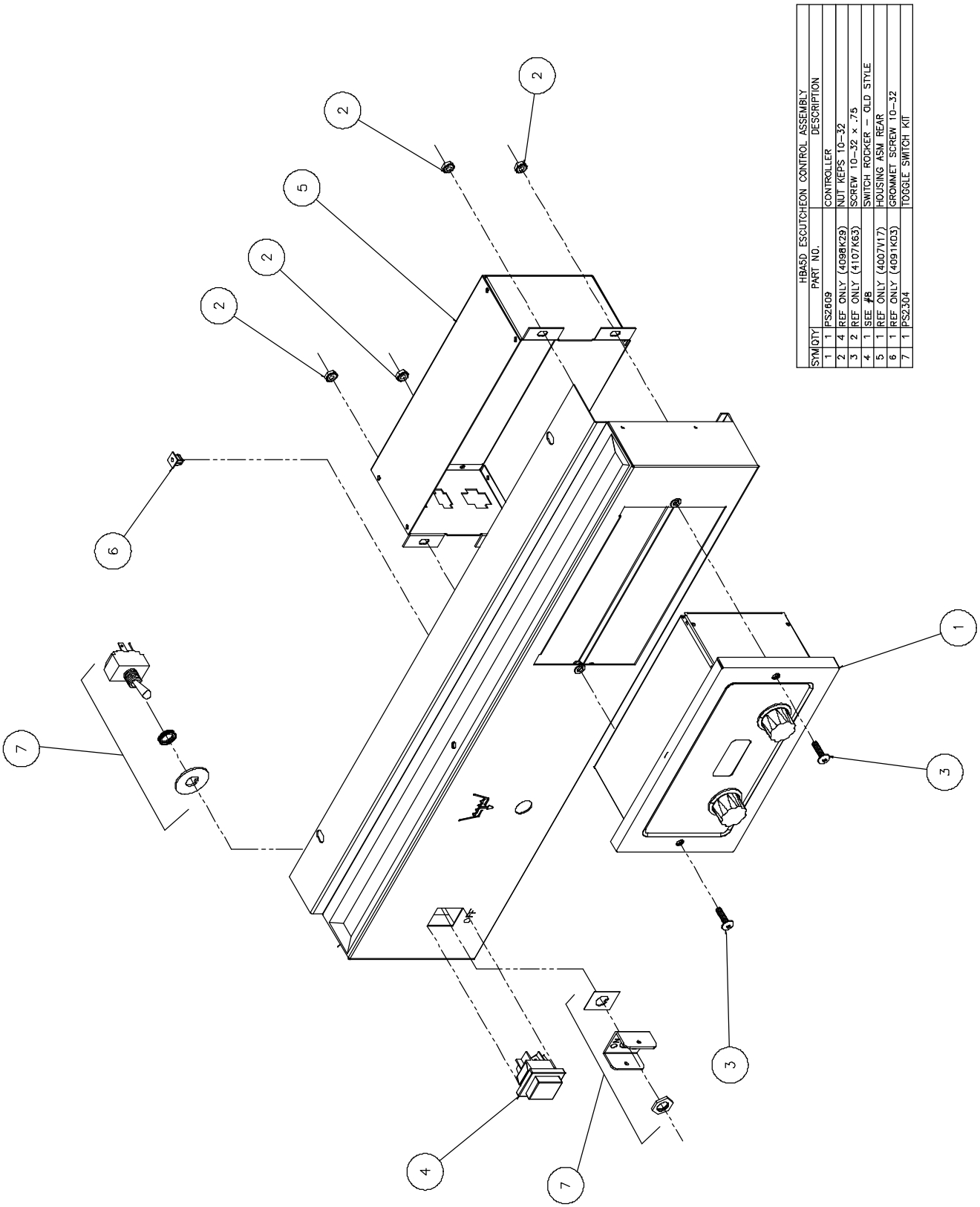


HBA5D DRAWER ASSEMBLY

SYM	QTY	PART NO	DESCRIPTION
1	1	REF ONLY (937V04)	CHANNEL MOUNT
2	1	REF ONLY (936N01)	COVER EXTERIOR
3	1	PS2213	COVER DRAWER KIT
4	1	PS1393	HANDLE KIT
5	2	PS2181-2	ROLLER KIT
6	4	REF ONLY (4107K35)	SCREW 1/4-20 x .625 PH
7	1	PS2195	GASKET DRAWER

WINSTON CVAP MODEL HBA0/5D SERIES

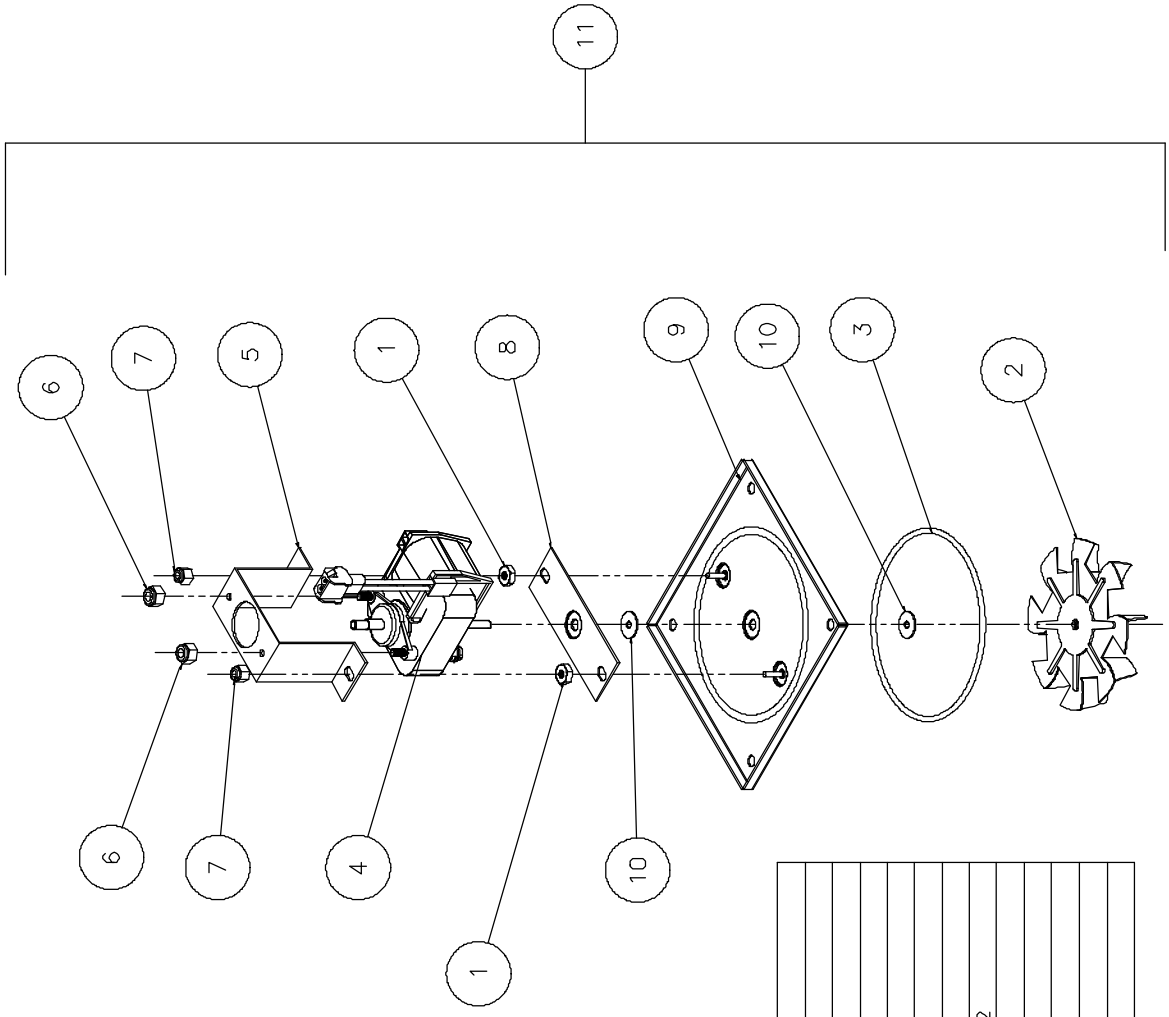
ESCUTCHEON CONTROL ASSEMBLY



HBA5D ESCUTCHEON CONTROL ASSEMBLY			
SYM	QTY	PART NO.	DESCRIPTION
1	1	PS2609	CONTROLLER
2	4	REF ONLY (4098K29)	NUT KEPS 10-32
3	2	REF ONLY (4107K63)	SCREW 10-32 x .75
4	1	SEE #5	SWITCH ROCKER - QLD STYLE
5	1	REF ONLY (4007V17)	HOUSING ASM REAR
6	1	REF ONLY (4091K03)	GROMMET SCREW 10-32
7	1	PS2304	TOGGLE SWITCH KIT

WINSTON CVAP MODEL HBA0/5D SERIES

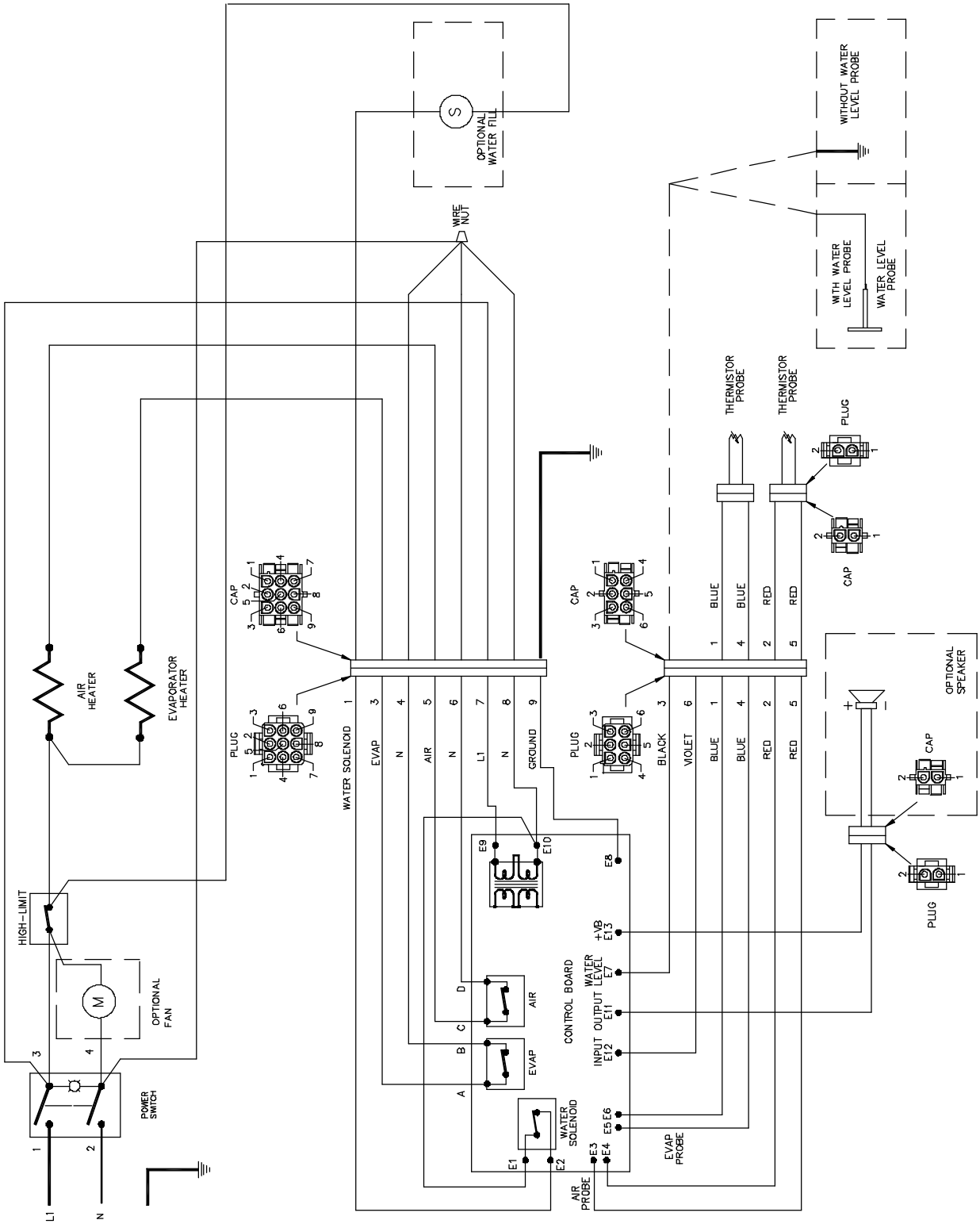
FAN ASSEMBLY (HBA5 MODELS ONLY)



HBA5D FAN ASM PS2704

SYM	QTY	PART NO.	DESCRIPTION
1	2	REF ONLY (4098W78)	NUT JAM 1/4-20
2	1	PS2544	FAN 4.00 DIA.
3	1	REF ONLY (6159W01)	GASKET FAN ASM
4	1	PS2196	MOTOR 120V
5	1	REF ONLY (176W08)	MOUNT FAN
6	2	REF ONLY (4098N53)	NUT NYLON INSERT #10-32
7	2	REF ONLY (4098Q58)	NUT NYLON INSERT #8-32
8	1	REF ONLY (1070W02)	RETAINER SHAFT
9	1	REF ONLY (6106W01)	PLATE WELD
10	2	REF ONLY (4023W21)	WASHER SLINGER
11	1	PS2704	FAN AND MOTOR ASM

SCHEMATIC (HBA0 MODELS DO NOT HAVE FAN)



HBA0/5
‘N’ SERIES

Parts Identification Manual

HBA5N1 SHOWN

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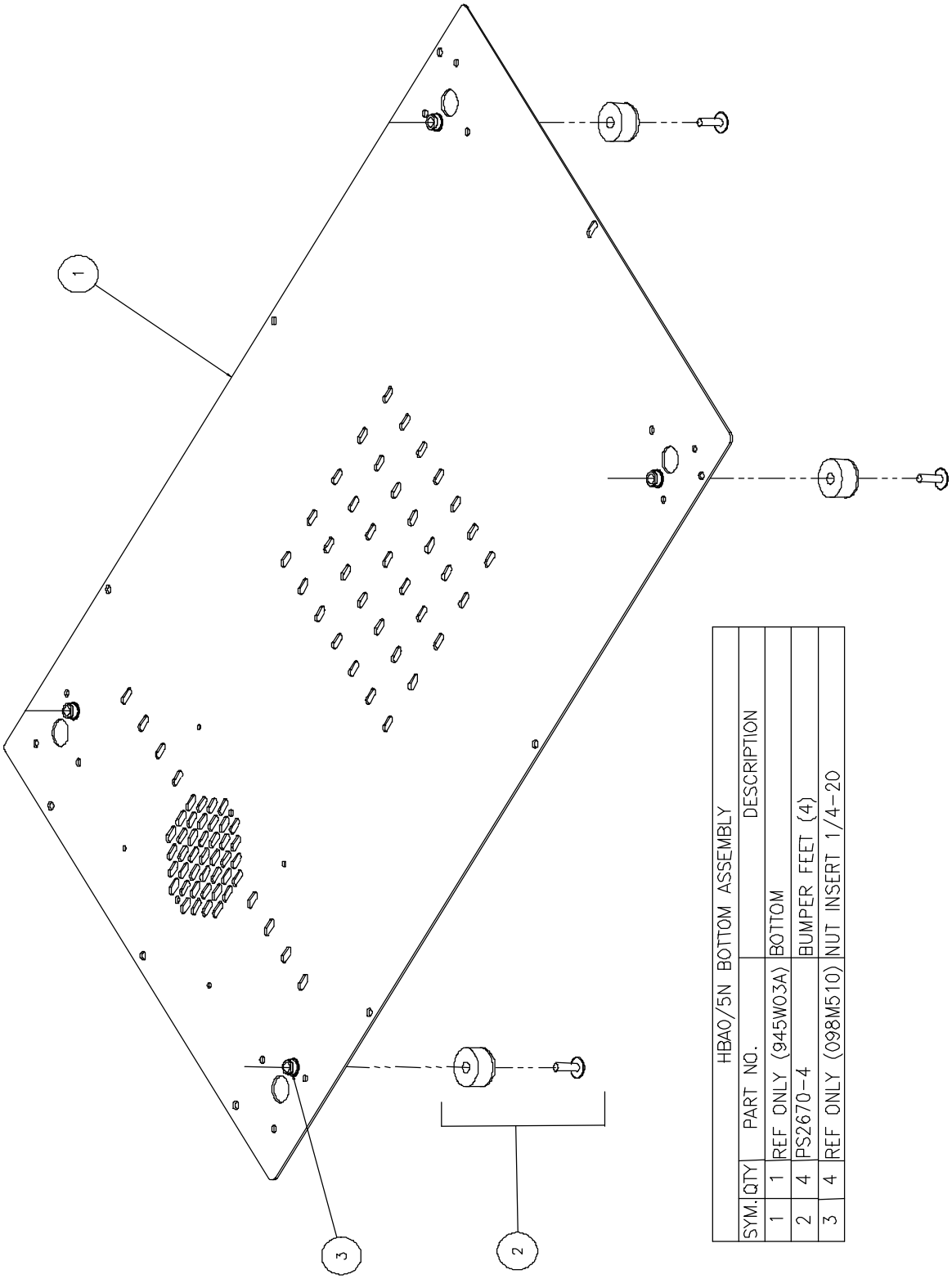
WINSTON CVAP MODEL HBA0/5N SERIES

BOTTOM ASSEMBLY

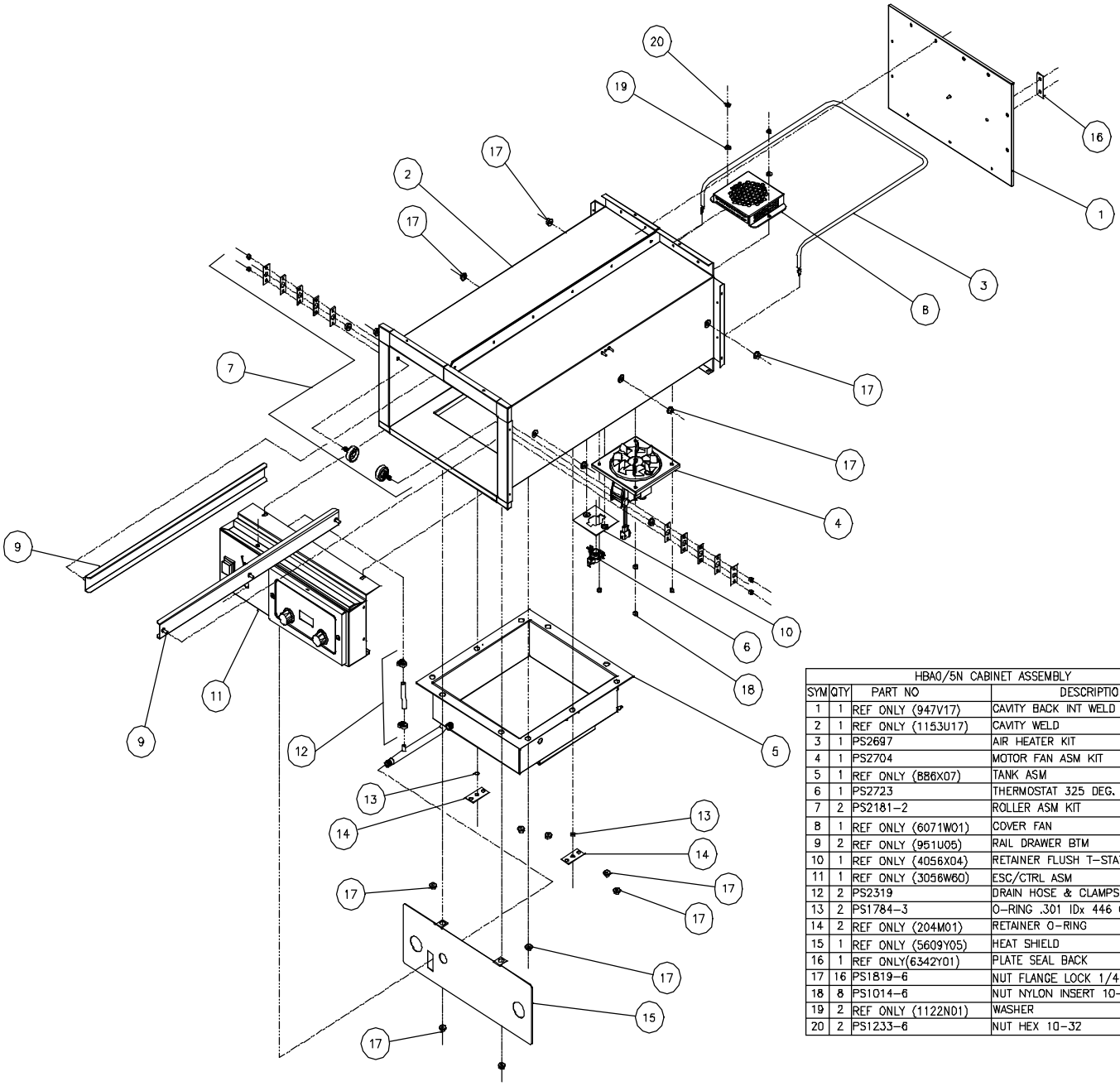


HBA0/5N BOTTOM ASSEMBLY

SYM.	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (945W03A)	BOTTOM
2	4	PS2670-4	BUMPER FEET (4)
3	4	REF ONLY (098M510)	NUT INSERT 1/4-20

WINSTON CVAP MODEL HBA0/5N SERIES

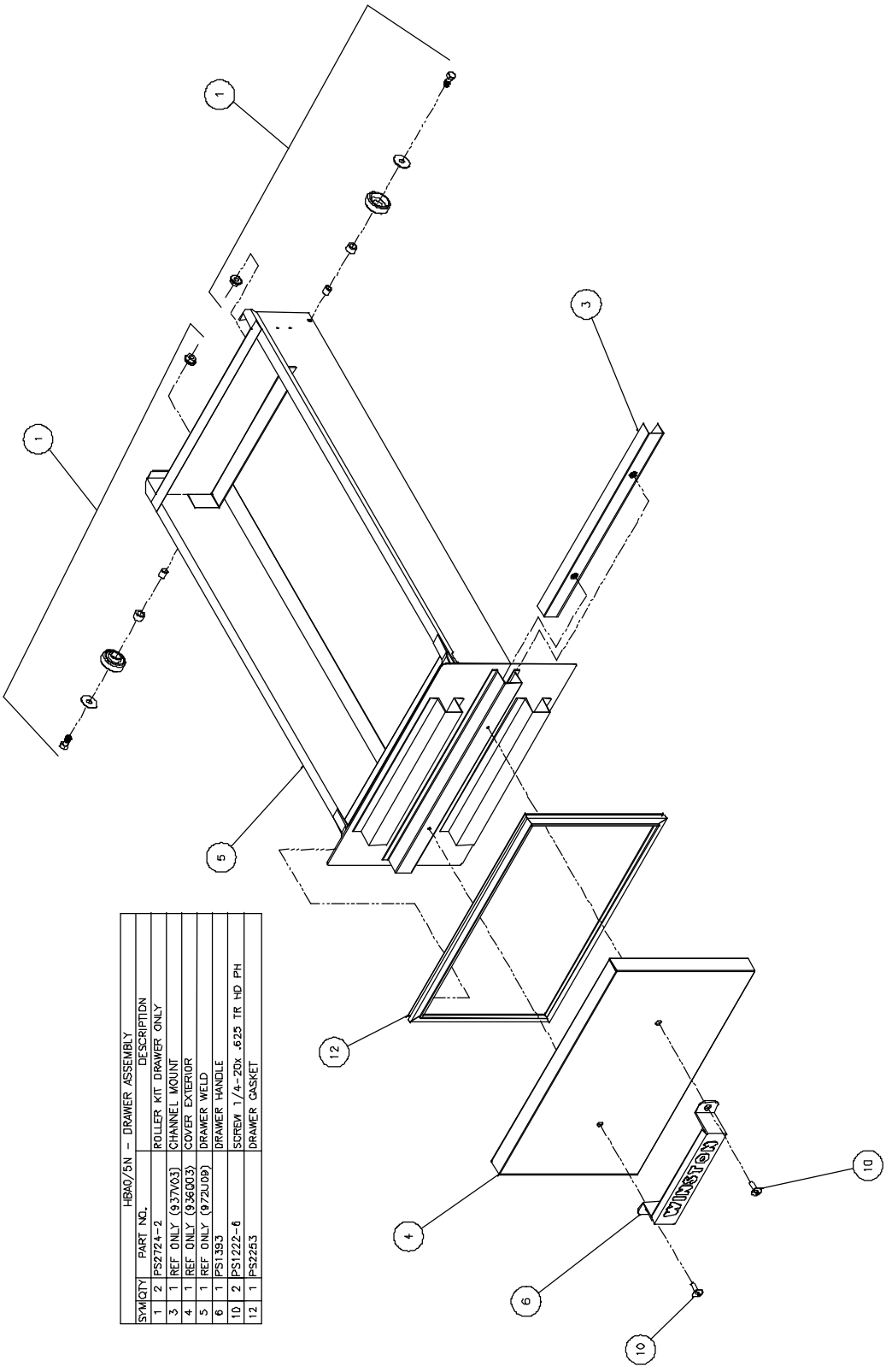
CABINET ASSEMBLY



HBA0/5N CABINET ASSEMBLY			
SYM	QTY	PART NO	DESCRIPTION
1	1	REF ONLY (947V17)	CAVITY BACK INT WELD
2	1	REF ONLY (1153U17)	CAVITY WELD
3	1	PS2697	AIR HEATER KIT
4	1	PS2704	MOTOR FAN ASM KIT
5	1	REF ONLY (886X07)	TANK ASM
6	1	PS2723	THERMOSTAT 325 DEG.
7	2	PS2181-2	ROLLER ASM KIT
8	1	REF ONLY (6071W01)	COVER FAN
9	2	REF ONLY (951U05)	RAIL DRAWER BTM
10	1	REF ONLY (4056X04)	RETAINER FLUSH T-STAT
11	1	REF ONLY (3056W60)	ESC/CTRL ASM
12	2	PS2319	DRAIN HOSE & CLAMPS KIT
13	2	PS1784-3	O-RING .301 IDx 446 O.D.
14	2	REF ONLY (204M01)	RETAINER O-RING
15	1	REF ONLY (5609Y05)	HEAT SHIELD
16	1	REF ONLY(6342Y01)	PLATE SEAL BACK
17	16	PS1819-6	NUT FLANGE LOCK 1/4 - 20
18	8	PS1014-6	NUT NYLON INSERT 10-32 ZINC
19	2	REF ONLY (1122N01)	WASHER
20	2	PS1233-6	NUT HEX 10-32

WINSTON CVAP MODEL HBA0/5N SERIES

DRAWER ASSEMBLY

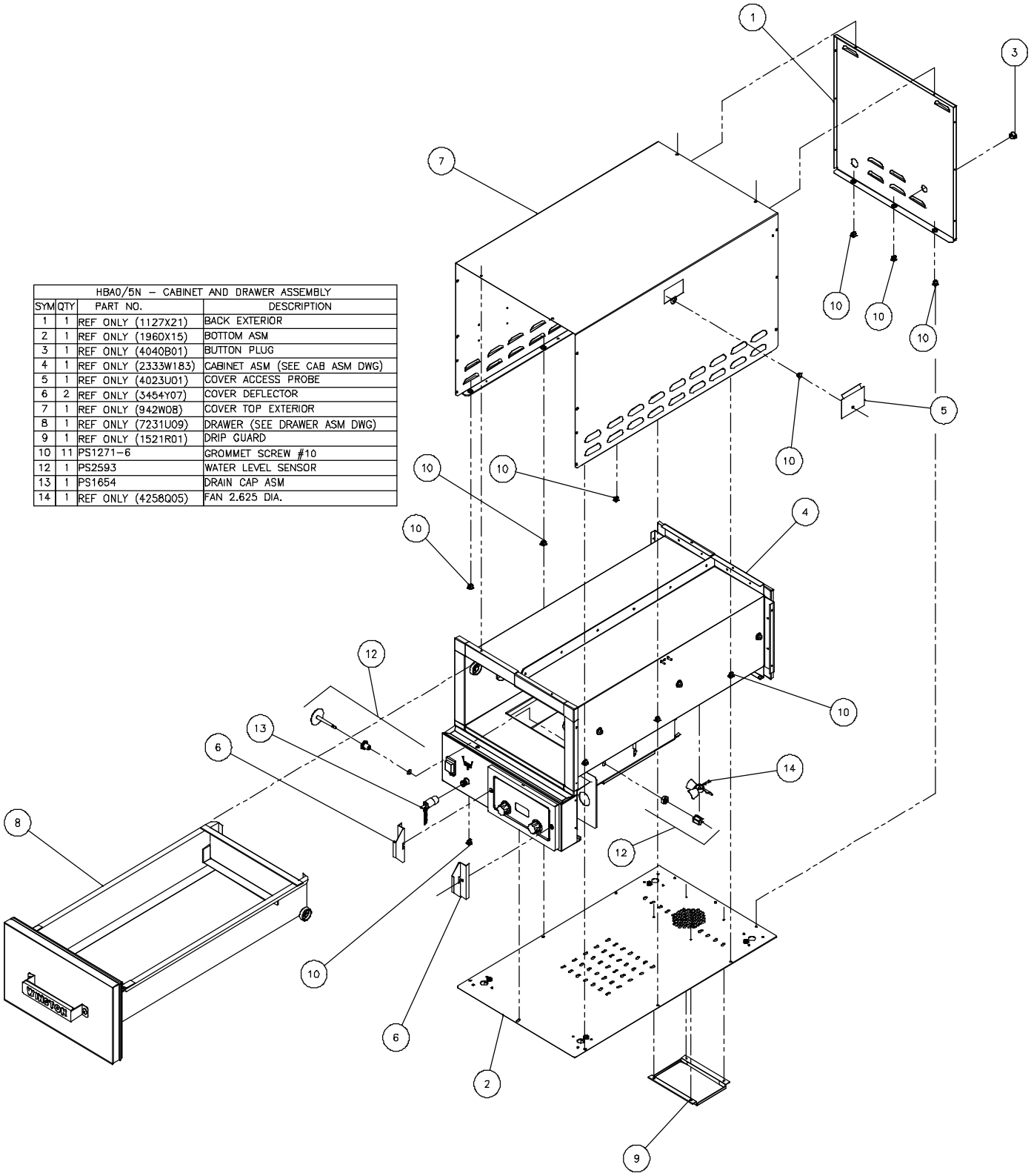


HBA0/5N – DRAWER ASSEMBLY

SYM	QTY	PART NO.	DESCRIPTION
1	2	PS2724-2	ROLLER KIT DRAWER ONLY
3	1	REF ONLY (9377Q03)	CHANNEL MOUNT
4	1	REF ONLY (9360Q03)	COVER EXTERIOR
5	1	REF ONLY (972U09)	DRAWER WELD
6	1	PS1393	DRAWER HANDLE
10	2	PS1222-6	SCREW 1/4-20x .625 TR HD PH
12	1	PS2253	DRAWER GASKET

WINSTON CVAP MODEL HBA0/5N SERIES

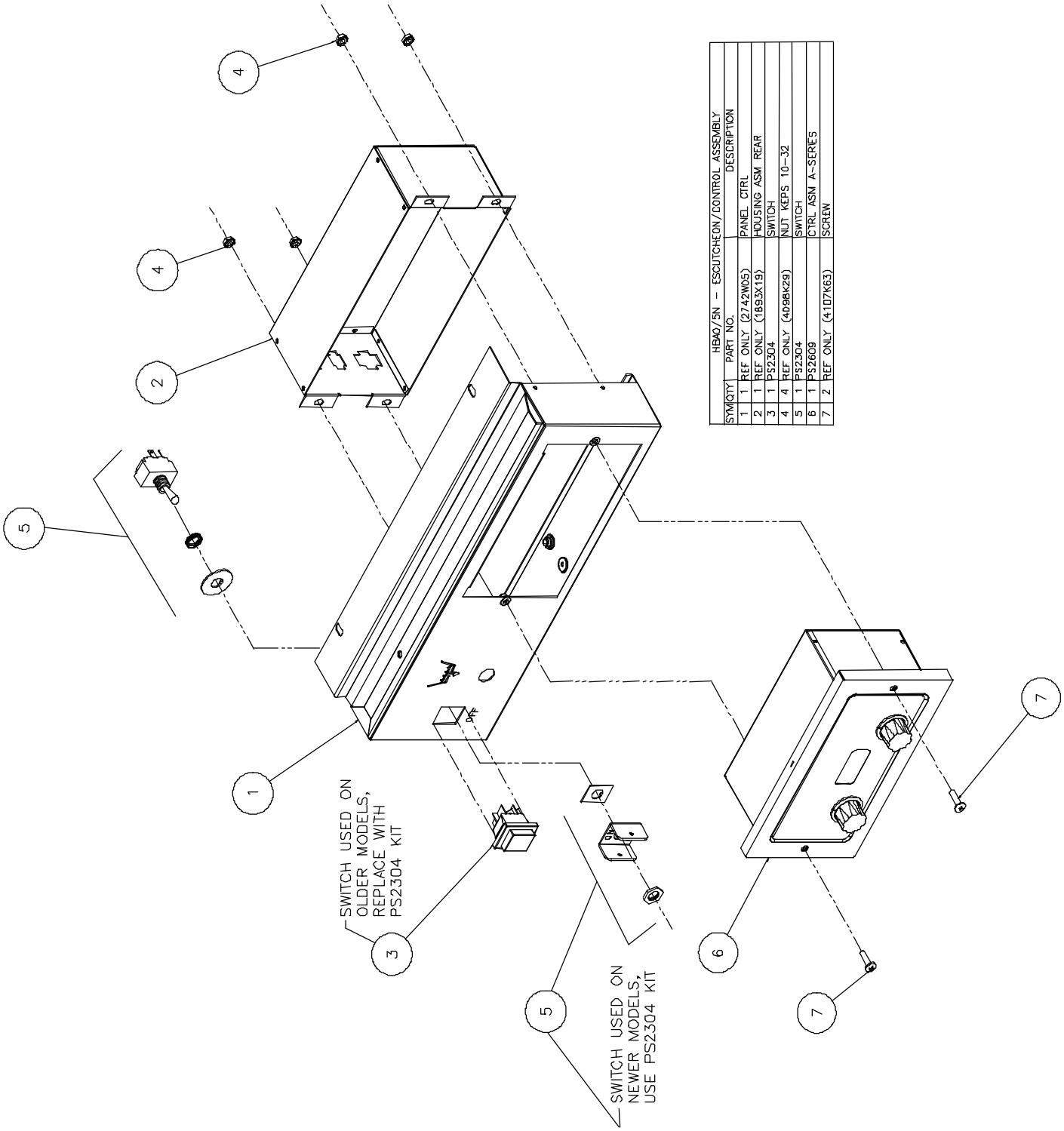
CABINET & DRAWER ASSEMBLY



HBA0/5N – CABINET AND DRAWER ASSEMBLY			
SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (1127X21)	BACK EXTERIOR
2	1	REF ONLY (1960X15)	BOTTOM ASM
3	1	REF ONLY (4040B01)	BUTTON PLUG
4	1	REF ONLY (2333W183)	CABINET ASM (SEE CAB ASM DWG)
5	1	REF ONLY (4023U01)	COVER ACCESS PROBE
6	2	REF ONLY (3454Y07)	COVER DEFLECTOR
7	1	REF ONLY (942W08)	COVER TOP EXTERIOR
8	1	REF ONLY (7231U09)	DRAWER (SEE DRAWER ASM DWG)
9	1	REF ONLY (1521R01)	DRIP GUARD
10	11	PS1271-6	GROMMET SCREW #10
12	1	PS2593	WATER LEVEL SENSOR
13	1	PS1654	DRAIN CAP ASM
14	1	REF ONLY (4258Q05)	FAN 2.625 DIA.

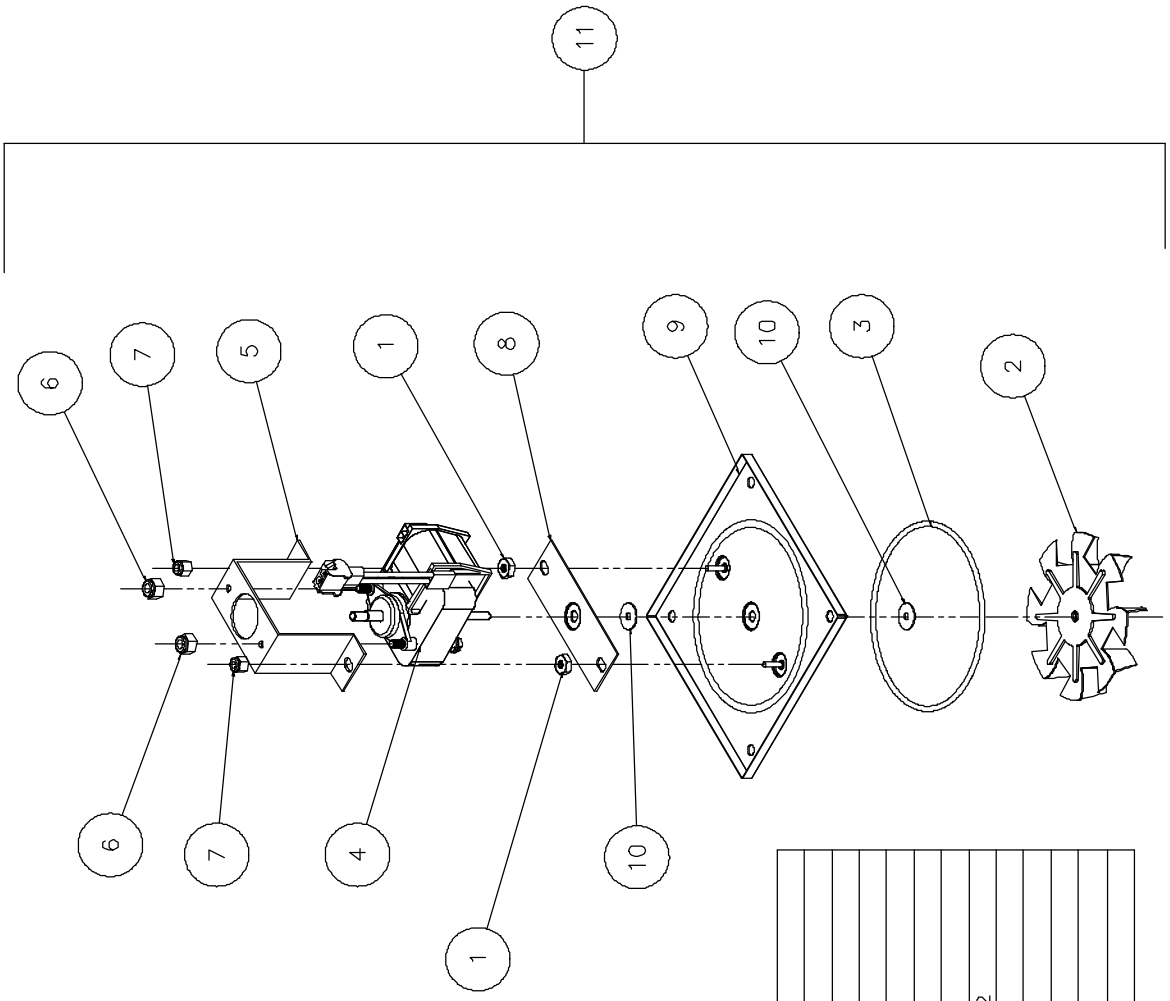
WINSTON CVAP MODEL HBA0/5N SERIES

ESCUTCHEON / CONTROL ASSEMBLY


HBA0/5N - ESCUTCHEON/CONTROL ASSEMBLY
SYM QTY PART NO. DESCRIPTION
1 1 REF ONLY (2742W05) PANEL CTRL
2 1 REF ONLY (1893X19) HOUSING ASM REAR
3 1 PS2304 SWITCH
4 4 REF ONLY (4098K29) NUT KEPS 10-32
5 1 PS2304 SWITCH
6 1 PS2609 CTRL ASM A-SERIES
7 2 REF ONLY (4107K63) SCREW
SWITCH USED ON OLDER MODELS, REPLACE WITH PS2304 KIT
SWITCH USED ON NEWER MODELS, USE PS2304 KIT

WINSTON CVAP MODEL HBA0/5N SERIES

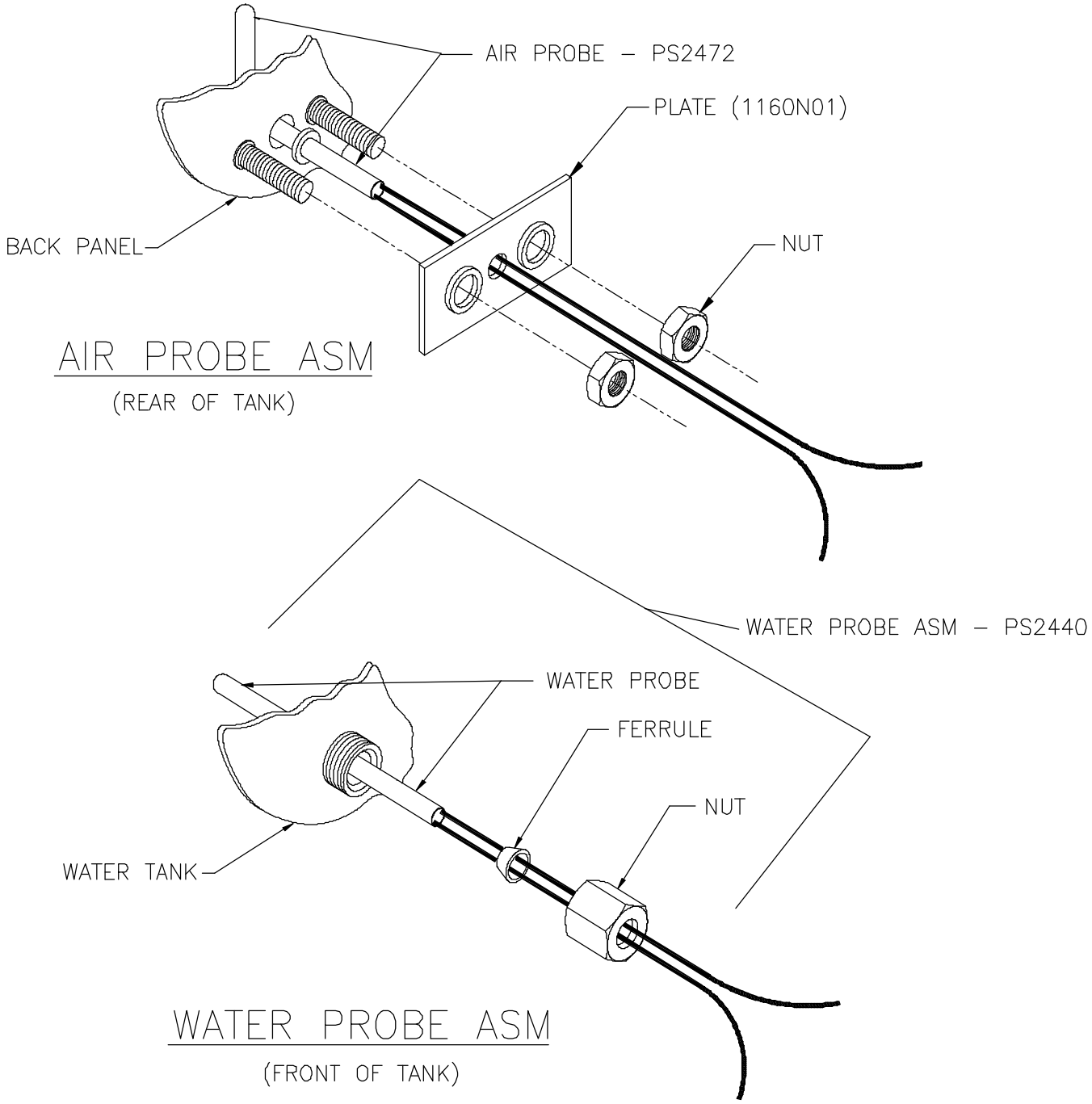
FAN ASSEMBLY (HBA5 MODELS ONLY)



HBA5N FAN ASM PS2704

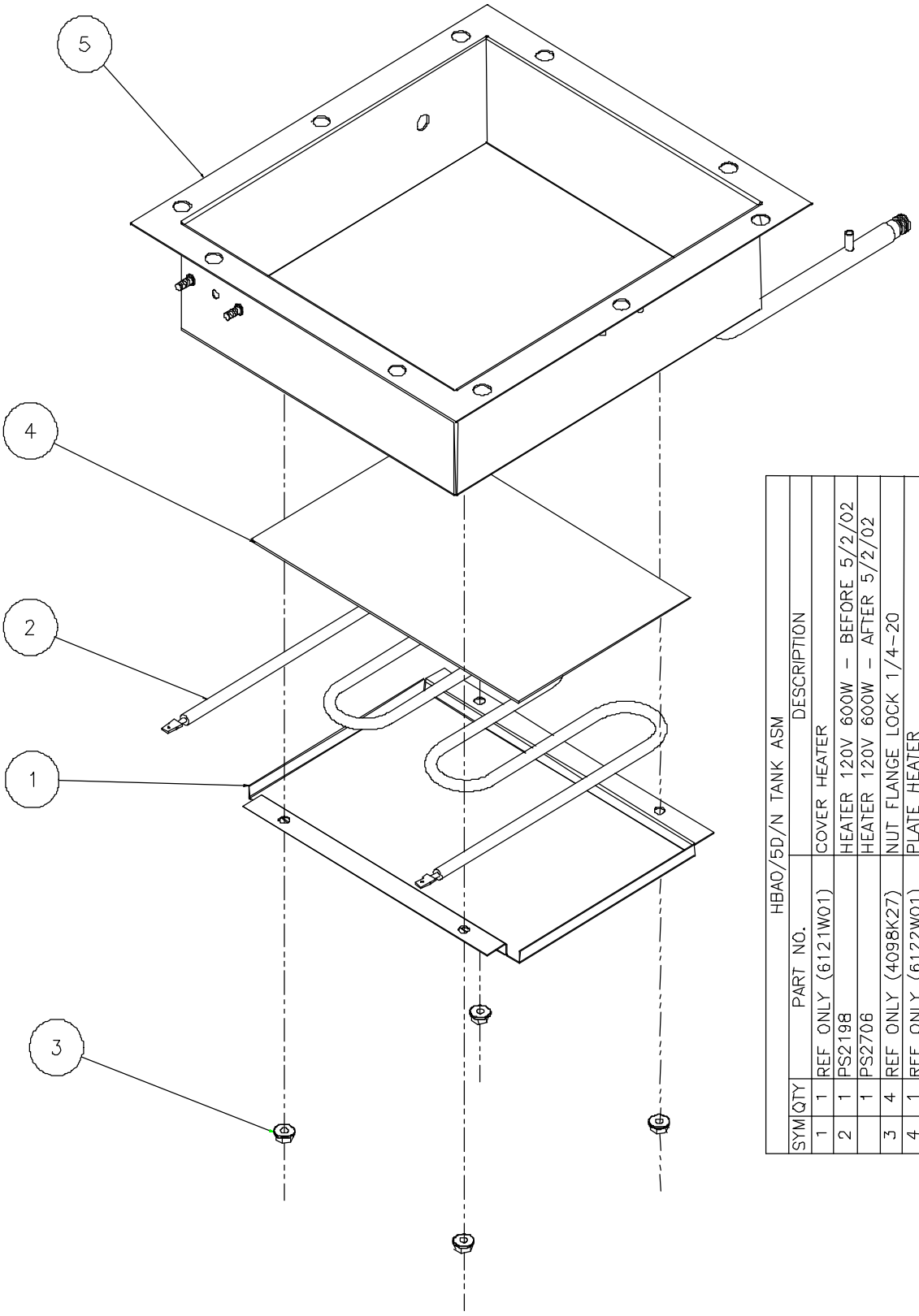
SYM	QTY	PART NO.	DESCRIPTION
1	2	REF ONLY (4098W78)	NUT JAM 1/4-20
2	1	PS2544	FAN 4.00 DIA.
3	1	REF ONLY (6159W01)	GASKET FAN ASM
4	1	PS2196	MOTOR 120V
5	1	REF ONLY (176W08)	MOUNT FAN
6	2	REF ONLY (4098N53)	NUT NYLON INSERT #10-32
7	2	REF ONLY (4098Q58)	NUT NYLON INSERT #8-32
8	1	REF ONLY (1070W02)	RETAINER SHAFT
9	1	REF ONLY (6106W01)	PLATE WELD
10	2	REF ONLY (4023W21)	WASHER SLINGER
11	1	PS2704	FAN AND MOTOR ASM

PROBE ASSEMBLY



WINSTON CVAP MODEL HBA0/5N SERIES

TANK ASSEMBLY

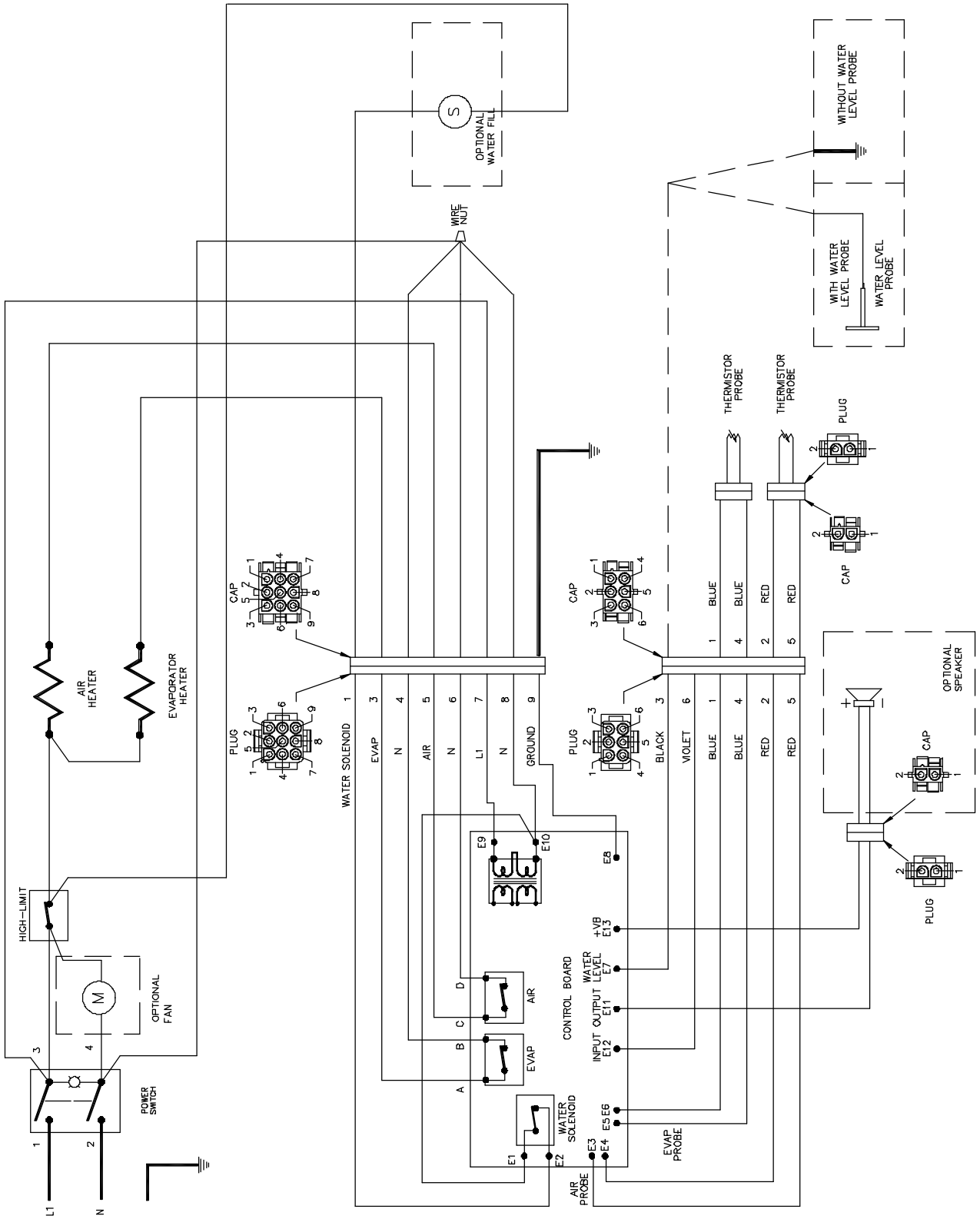


HBA0/5D/N TANK ASM

SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (6121W01)	COVER HEATER
2	1	PS2198	HEATER 120V 600W - BEFORE 5/2/02
	1	PS2706	HEATER 120V 600W - AFTER 5/2/02
3	4	REF ONLY (4098K27)	NUT FLANGE LOCK 1/4-20
4	1	REF ONLY (6122W01)	PLATE HEATER
5	1	REF ONLY (965U08)	TANK WELD

WINSTON CVAP MODEL HBA0/5N SERIES

SCHEMATIC (HBA0 MODELS DO NOT HAVE FAN)



HBK, L, M, 8, 0 or 5
‘D’ SERIES

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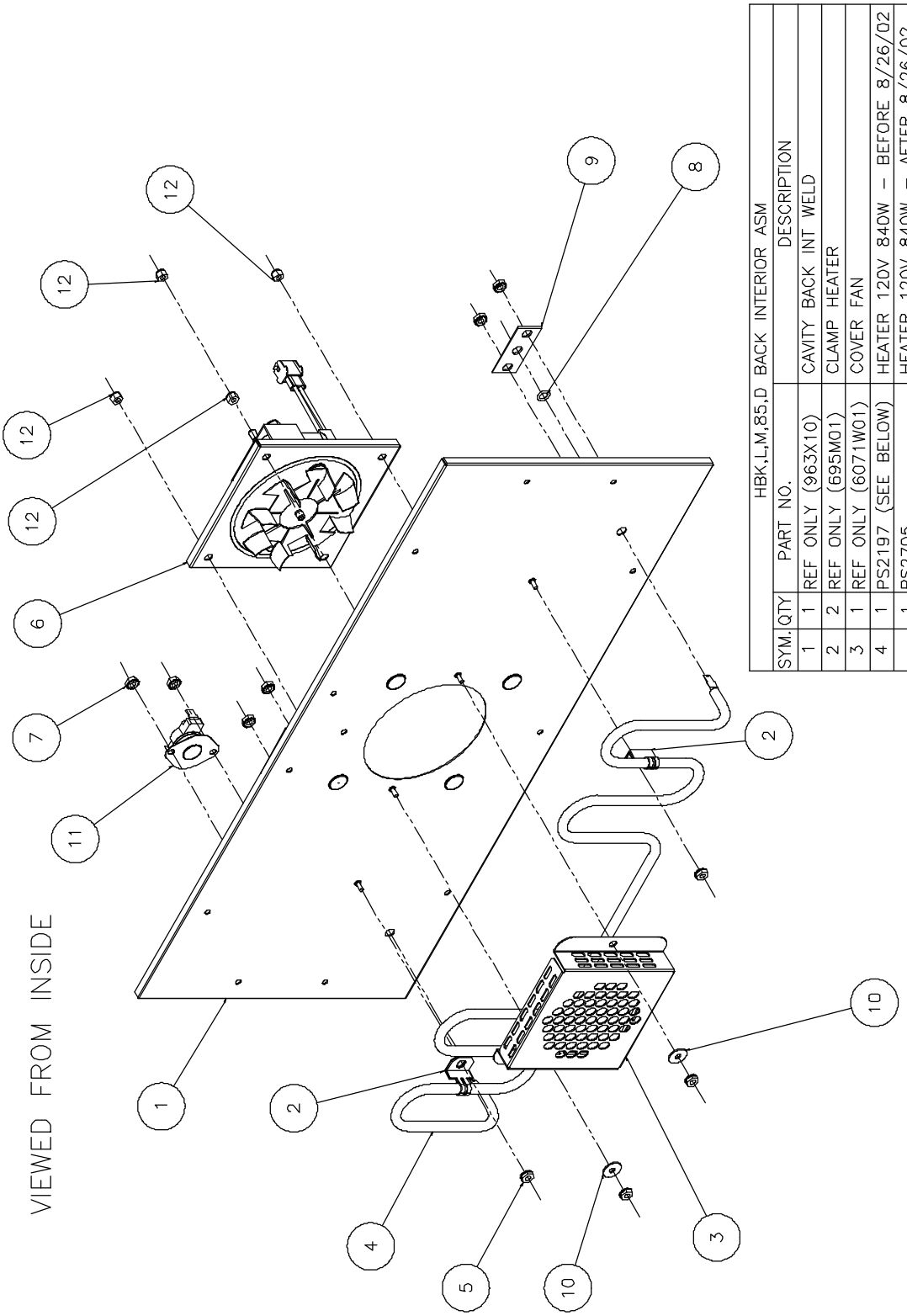
MODELS COVERED BY THIS MANUAL:

HB80D1
HB85D1
HBK0D1
HBK5D1
HBL0D1
HBL5D1
HBM0D1
HBM5D1

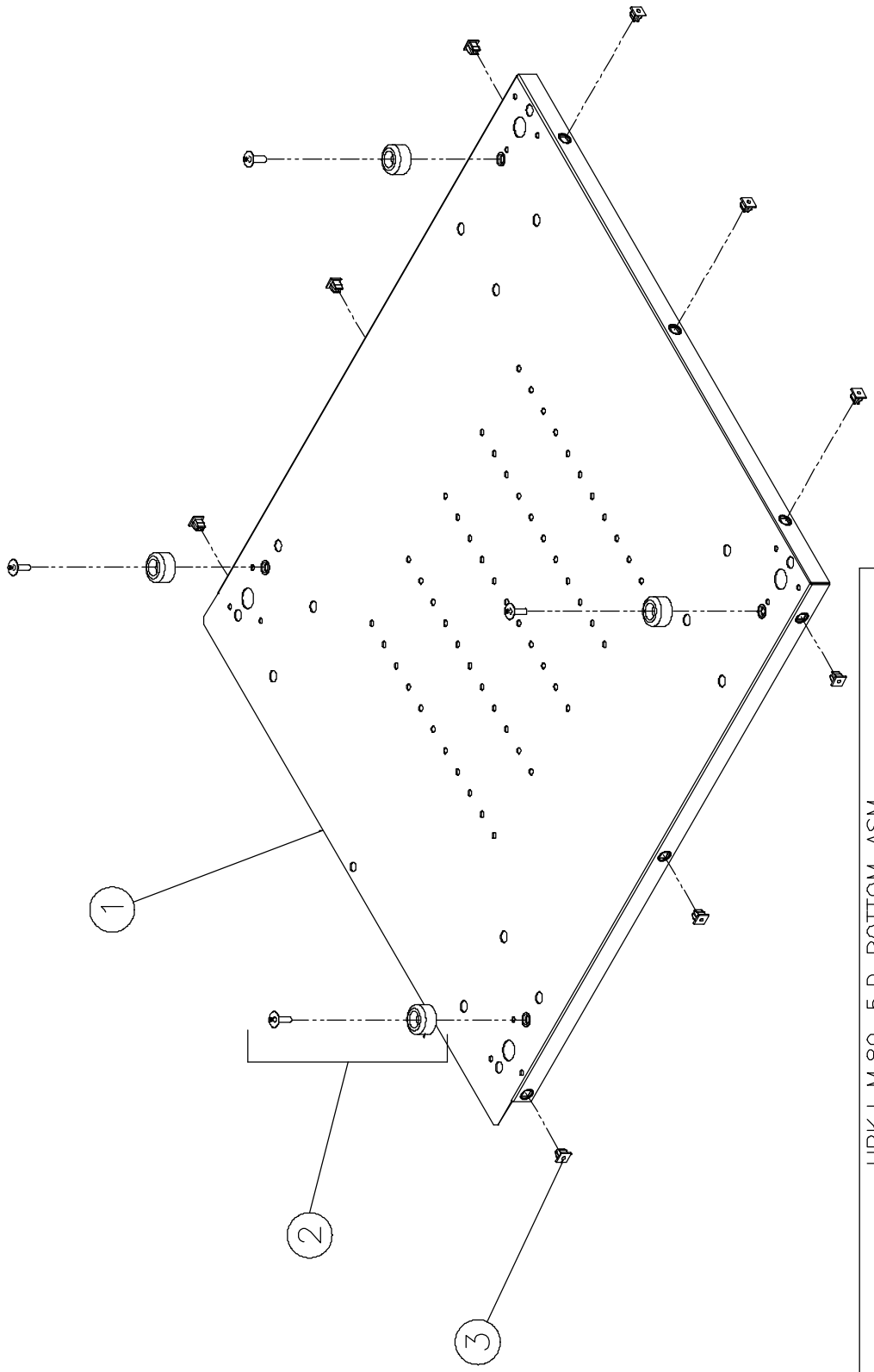
WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

BACK INTERIOR ASSEMBLY



HBK,L,M,85,D BACK INTERIOR ASM			
SYM.	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (963X10)	CAVITY BACK INT WELD
2	2	REF ONLY (695M01)	CLAMP HEATER
3	1	REF ONLY (6071W01)	COVER FAN
4	1	PS2197 (SEE BELOW)	HEATER 120V 840W – BEFORE 8/26/02
	1	PS2705	HEATER 120V 840W – AFTER 8/26/02
5	4	PS1233-6	NUT HEX #10-32 S.S.
6	1	PS2704	MOTOR FAN ASM
7	10	REF ONLY (4098K29)	NUT KEPS #10-32
8	2	PS1784-3	O-RING .301 ID x .446 OD.
9	2	REF ONLY (204M01)	RETAINER O-RING HEATER
10	2	REF ONLY (1122N01)	WASHER
11	1	PS2199	THERMOSTAT 250
12	4	REF ONLY (4098N53)	NUT NYLON INSERT #10-32

BOTTOM ASSEMBLY

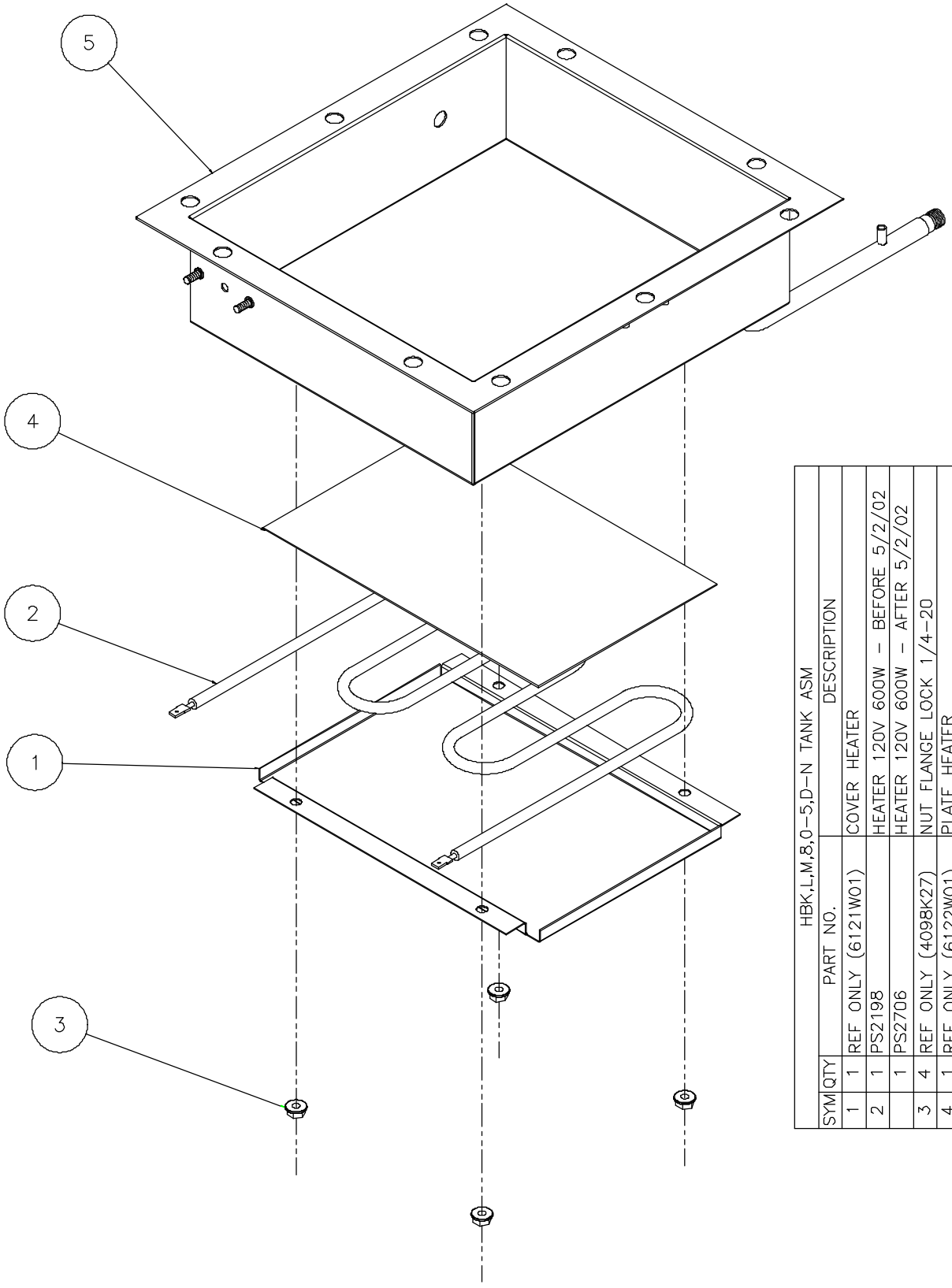


HBK,L,M,80-5,D BOTTOM ASM

SYM	Qty	PART NO.	DESCRIPTION
1	1	REF ONLY (945W11)	BOTTOM
2	4	PS2670-4	BUMPER FEET (4)
3	9	REF ONLY (4091K03)	GROMMET SCREW #10

WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

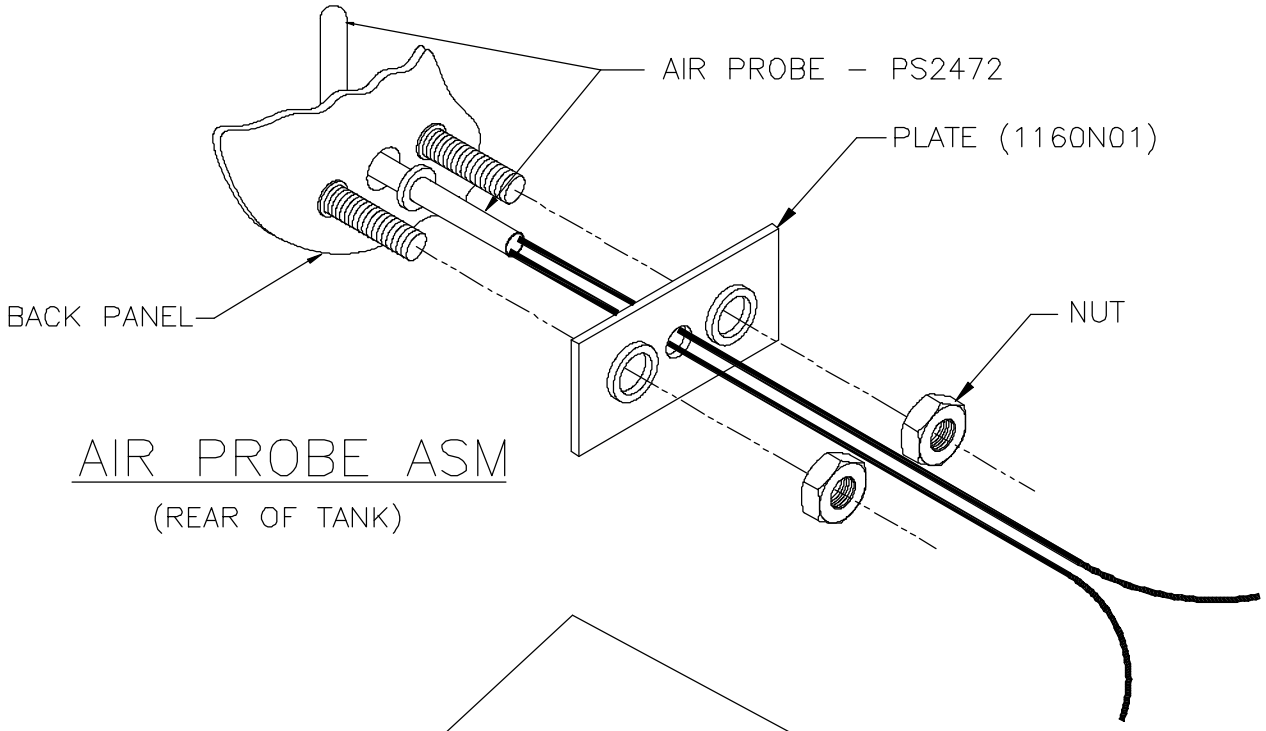
TANK ASSEMBLY



HBK,L,M,80-5,D-N TANK ASM

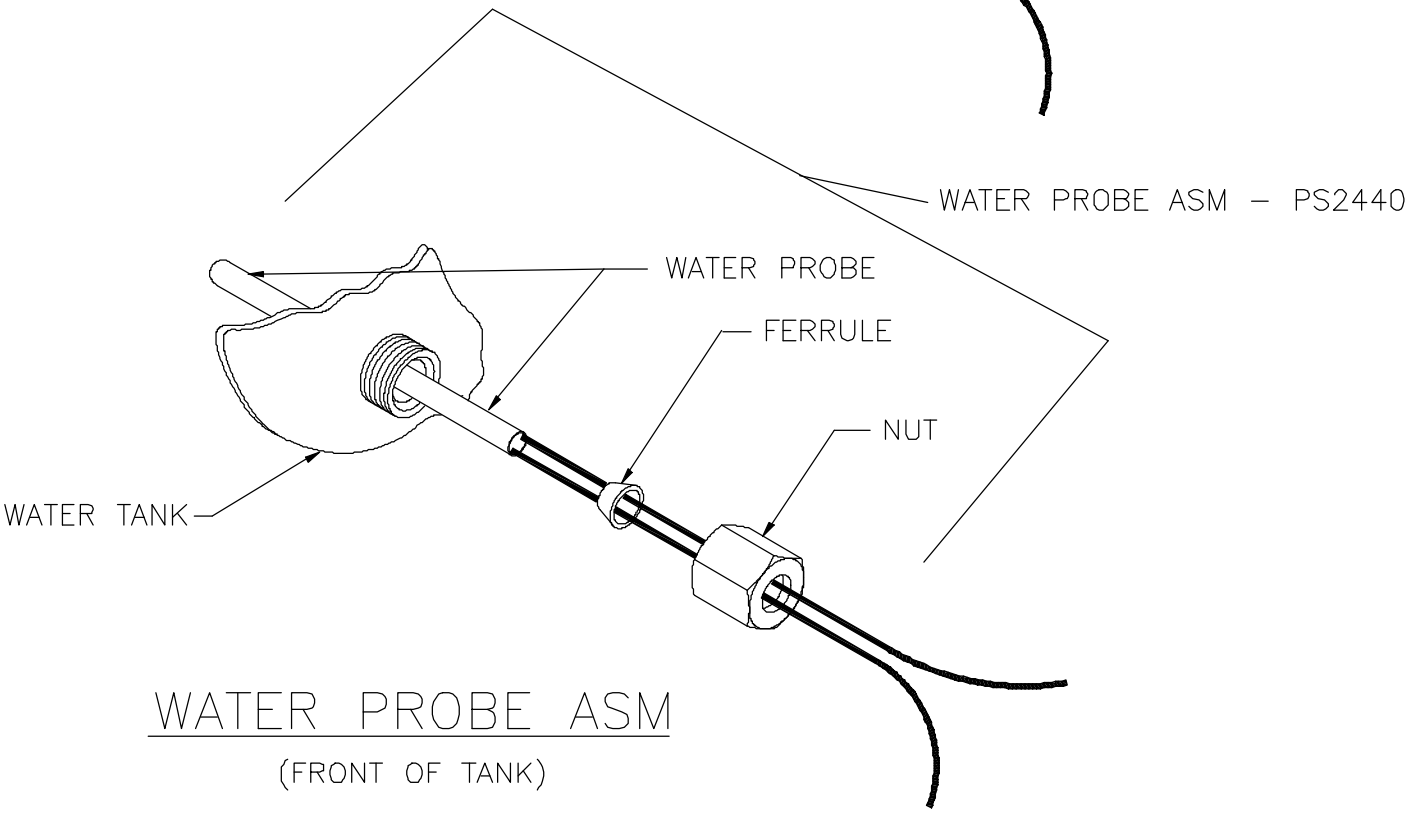
SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (6121W01)	COVER HEATER
2	1	PS2198	HEATER 120V 600W - BEFORE 5/2/02
	1	PS2706	HEATER 120V 600W - AFTER 5/2/02
3	4	REF ONLY (4098K27)	NUT FLANGE LOCK 1/4-20
4	1	REF ONLY (6122W01)	PLATE HEATER
5	1	REF ONLY (965U08)	TANK WELD

PROBE ASSEMBLIES



AIR PROBE ASM

(REAR OF TANK)

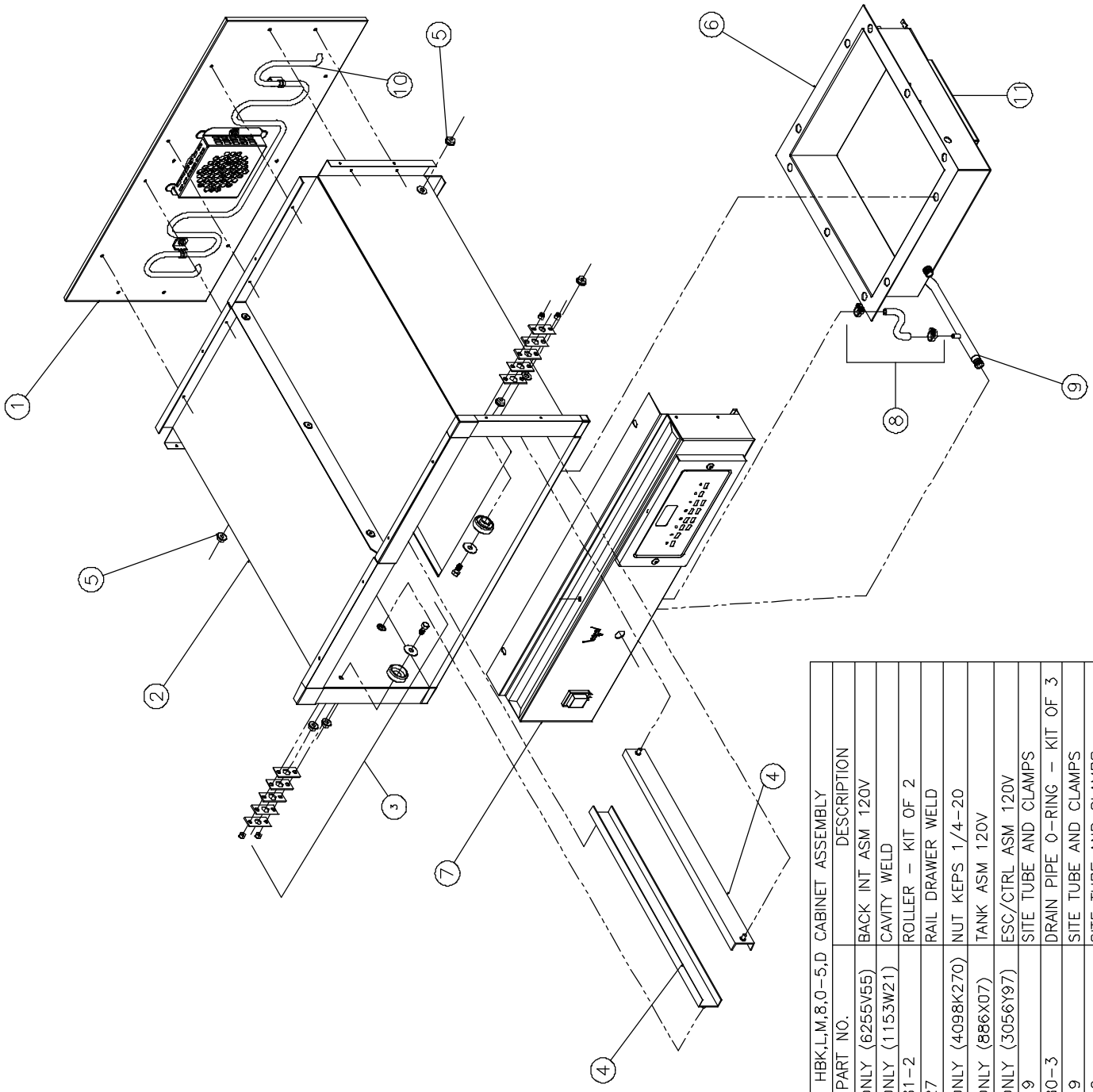


WATER PROBE ASM

(FRONT OF TANK)

WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

CABINET ASSEMBLY



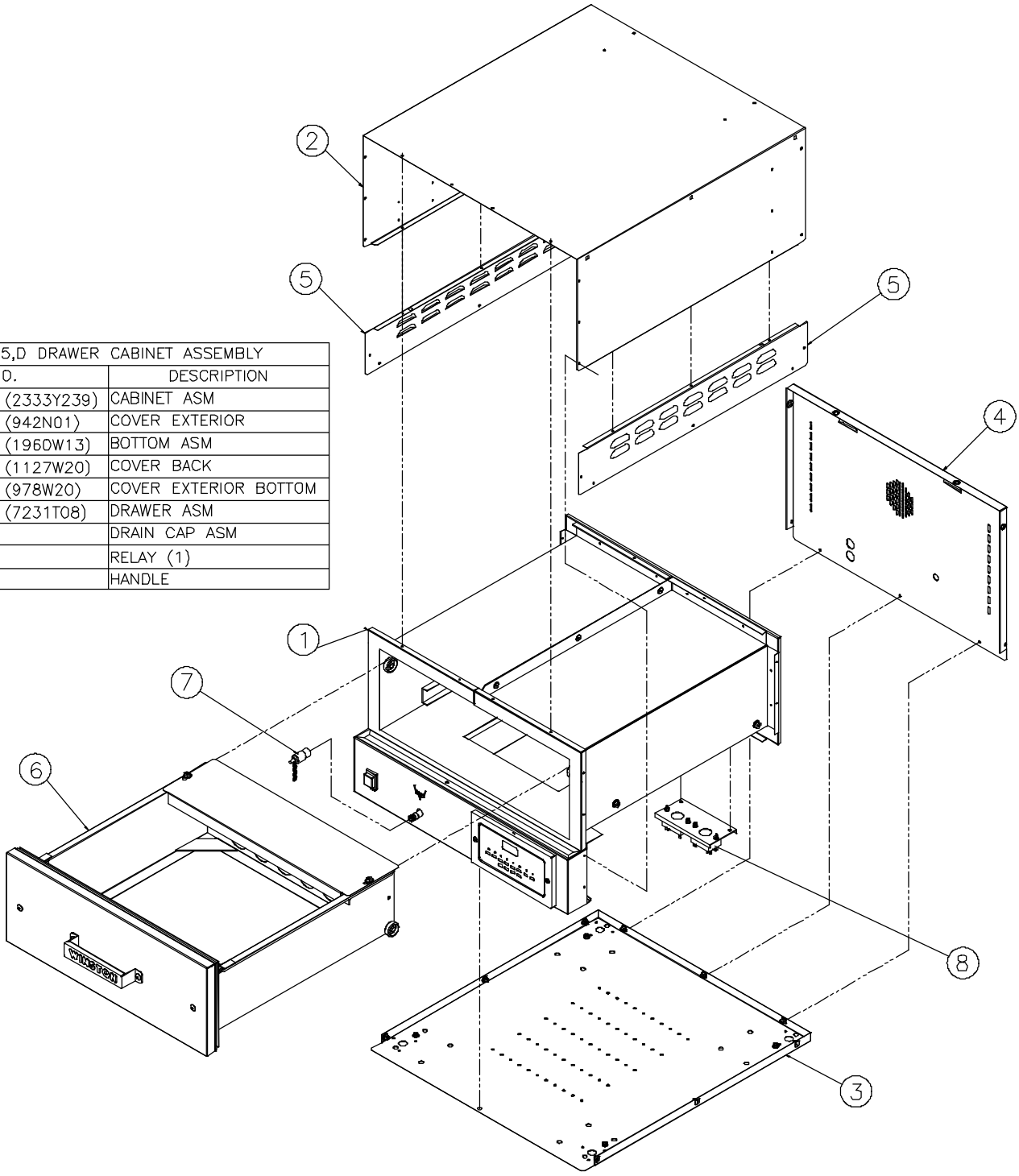
HBK,L,M,8,0-5,D CABINET ASSEMBLY

SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (6255V55)	BACK INT ASM 120V
2	1	REF ONLY (1153W21)	CAVITY WELD
3	2	PS2181-2	ROLLER - KIT OF 2
4	2	PS2227	RAIL DRAWER WELD
5	2	REF ONLY (4098K270)	NUT KEPS 1/4-20
6	1	REF ONLY (886X07)	TANK ASM 120V
7	1	REF ONLY (3056Y97)	ESC/CTRL ASM 120V
8	1	PS2319	SITE TUBE AND CLAMPS
9	1	PS1280-3	DRAIN PIPE O-RING - KIT OF 3
10	1	PS2319	SITE TUBE AND CLAMPS
11	1	PS2319	SITE TUBE AND CLAMPS

WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

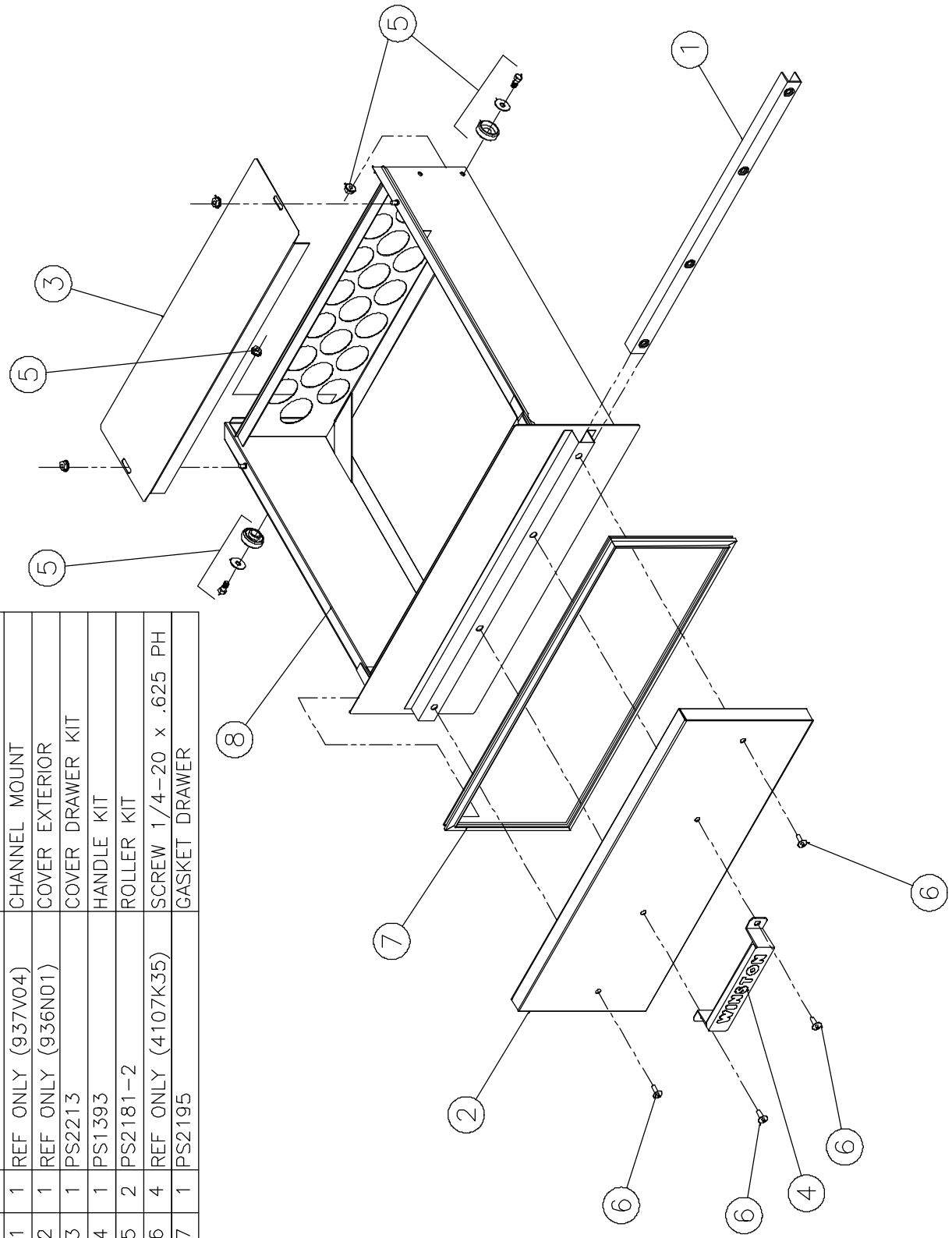
DRAWER CABINET ASSEMBLY

HBK,L,M,80-5,D DRAWER CABINET ASSEMBLY			
SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (2333Y239)	CABINET ASM
2	1	REF ONLY (942N01)	COVER EXTERIOR
3	1	REF ONLY (1960W13)	BOTTOM ASM
4	1	REF ONLY (1127W20)	COVER BACK
5	2	REF ONLY (978W20)	COVER EXTERIOR BOTTOM
6	1	REF ONLY (7231T08)	DRAWER ASM
7	1	PS1654	DRAIN CAP ASM
8	2	PS2649	RELAY (1)
9	1	PS1393	HANDLE



WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

DRAWER ASSEMBLY



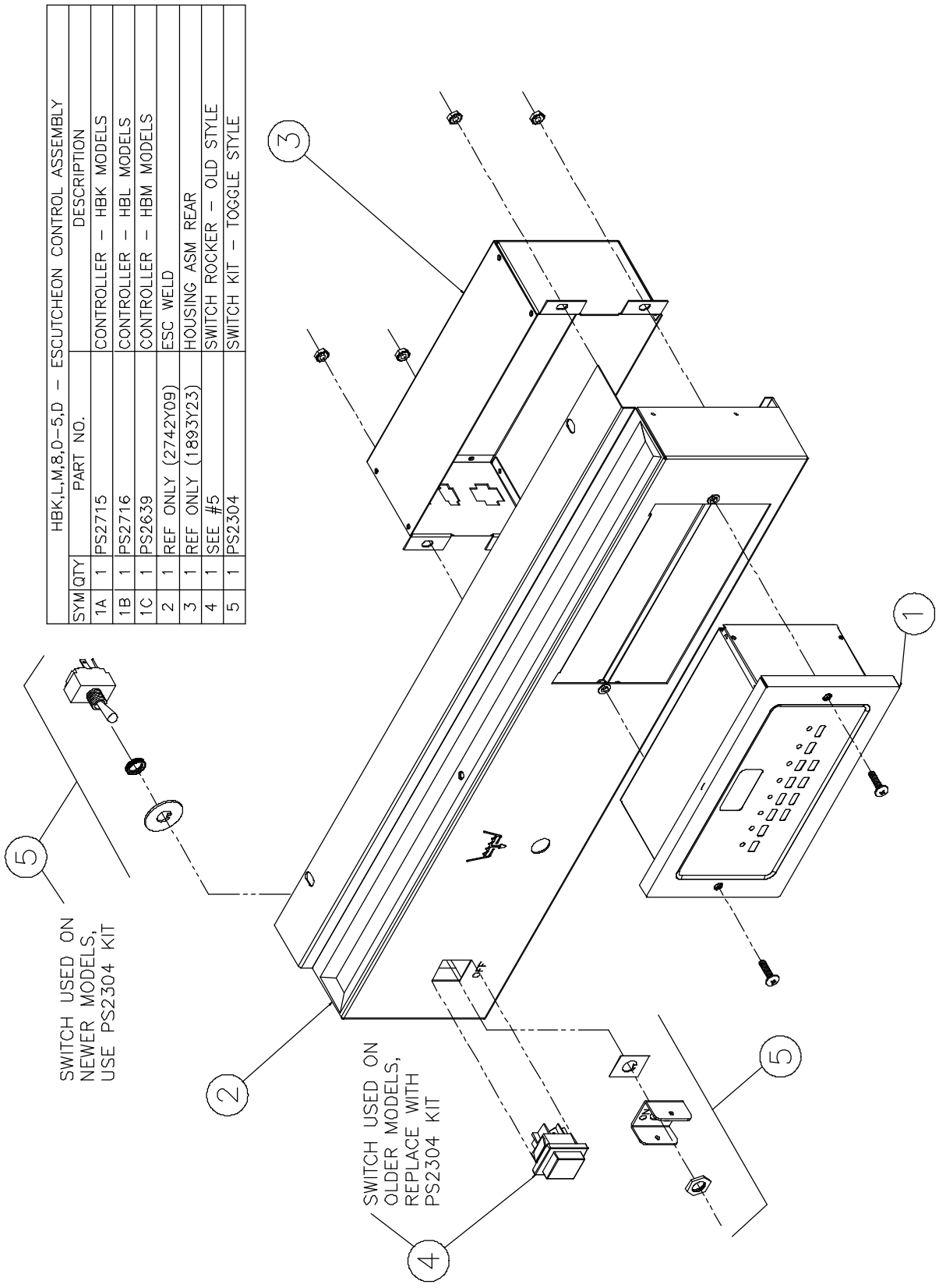
HBK,L,M,8,0-5,D DRAWER ASSEMBLY

SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY (937V04)	CHANNEL MOUNT
2	1	REF ONLY (936N01)	COVER EXTERIOR
3	1	PS2213	COVER DRAWER KIT
4	1	PS1393	HANDLE KIT
5	2	PS2181-2	ROLLER KIT
6	4	REF ONLY (4107K35)	SCREW 1/4-20 x .625 PH
7	1	PS2195	GASKET DRAWER

WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

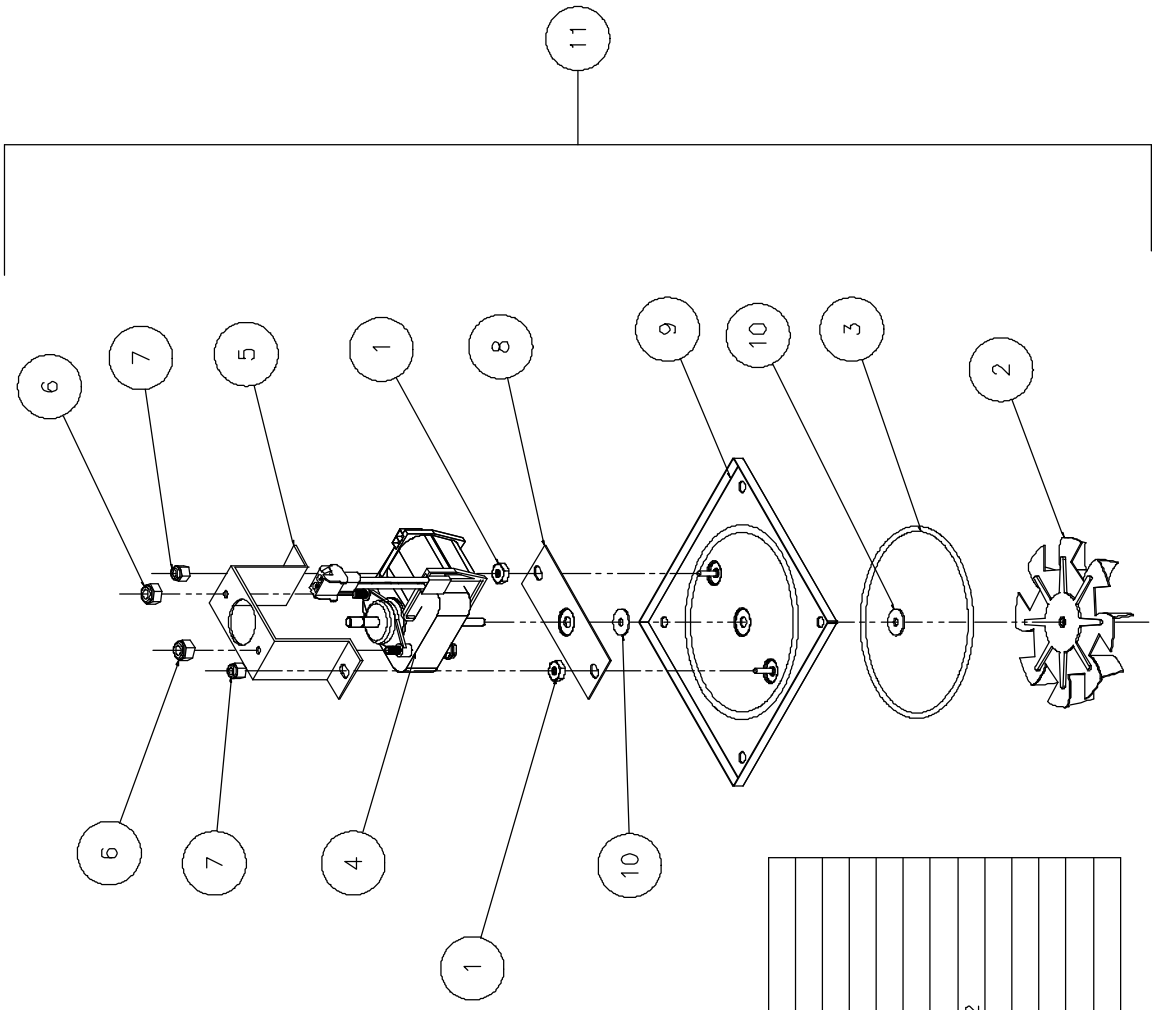
ESCUTCHEON CONTROL ASSEMBLY

HBK,L,M,8,D-5,D - ESCUTCHEON CONTROL ASSEMBLY			
SYM	QTY	PART NO.	DESCRIPTION
1A	1	PS2715	CONTROLLER - HBK MODELS
1B	1	PS2716	CONTROLLER - HBL MODELS
1C	1	PS2639	CONTROLLER - HBM MODELS
2	1	REF ONLY (2742Y09)	ESC WELD
3	1	REF ONLY (1893Y23)	HOUSING ASM REAR
4	1	SEE #5	SWITCH ROCKER - OLD STYLE
5	1	PS2304	SWITCH KIT - TOGGLE STYLE



WINSTON CVAP MODEL HBK,L,M,80-5,D SERIES

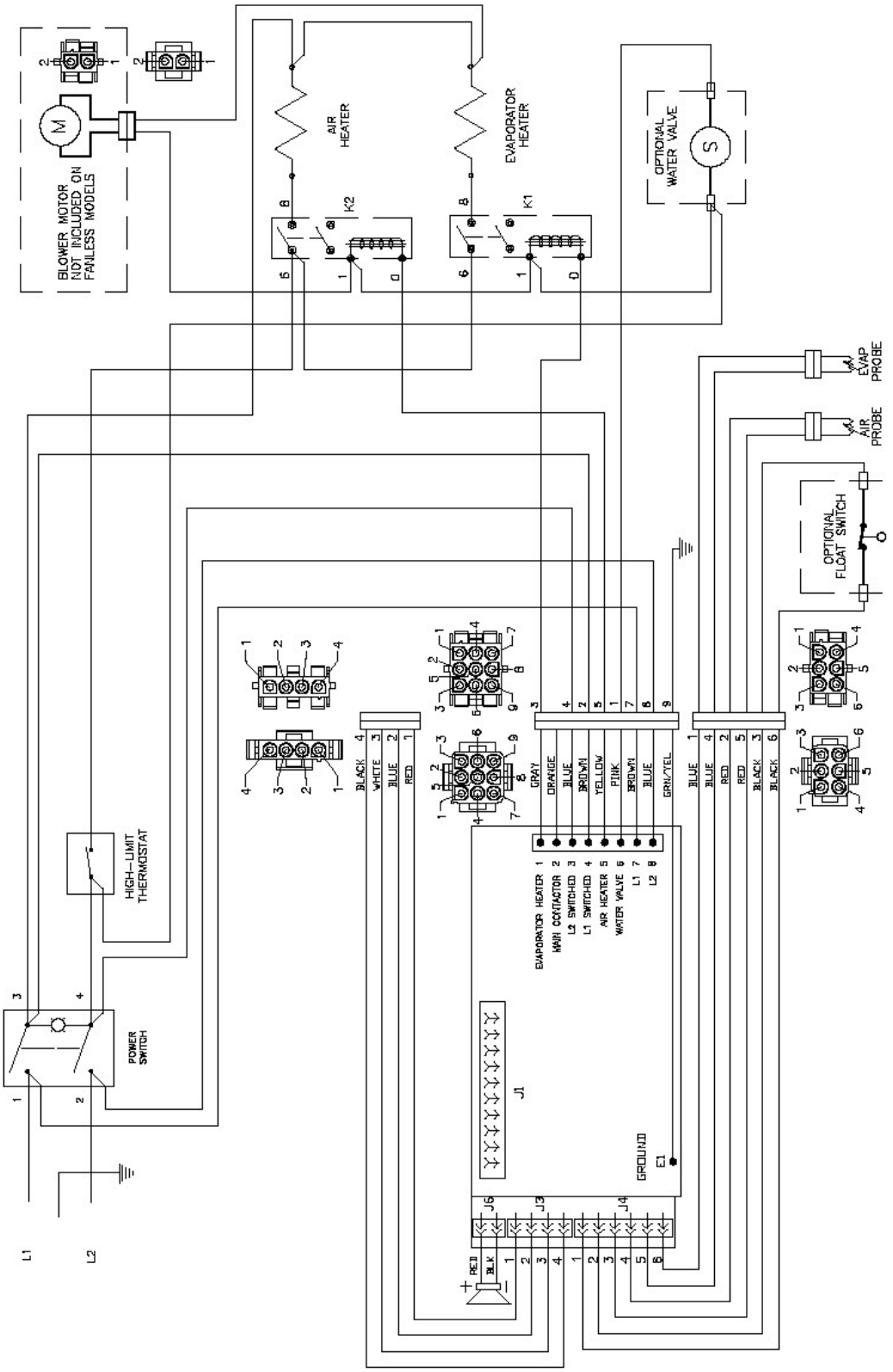
FAN ASSEMBLY (HBK,L,M,85 MODELS ONLY)



HBK-L-M-8,5,D-N FAN ASM PS2704

SYM	QTY	PART NO.	DESCRIPTION
1	2	REF ONLY (4098W78)	NUT JAM 1/4-20
2	1	PS2544	FAN 4.00 DIA.
3	1	REF ONLY (6159W01)	GASKET FAN ASM
4	1	PS2196	MOTOR 120V
5	1	REF ONLY (176W08)	MOUNT FAN
6	2	REF ONLY (4098N53)	NUT NYLON INSERT #10-32
7	2	REF ONLY (4098Q58)	NUT NYLON INSERT #8-32
8	1	REF ONLY (1070W02)	RETAINER SHAFT
9	1	REF ONLY (6106W01)	PLATE WELD
10	2	REF ONLY (4023W21)	WASHER SLINGER
11	1	PS2704	FAN AND MOTOR ASM

SCHEMATIC
(model numbers with '0' in the forth character do not have fan)



WINSTON INDUSTRIES

PF46C and PF56C Pressure Fryer

Parts Identification Manual

Winston Industries, LLC - 2345 Carton Dr. - Louisville - Kentucky - 40299
www.cvap.com 1-800-234-5286 502-495-5400 FAX 502-495-5458 www.winstonindustries.com
4272X639_rev04_10-05-05_partsID_PF46/56C.doc

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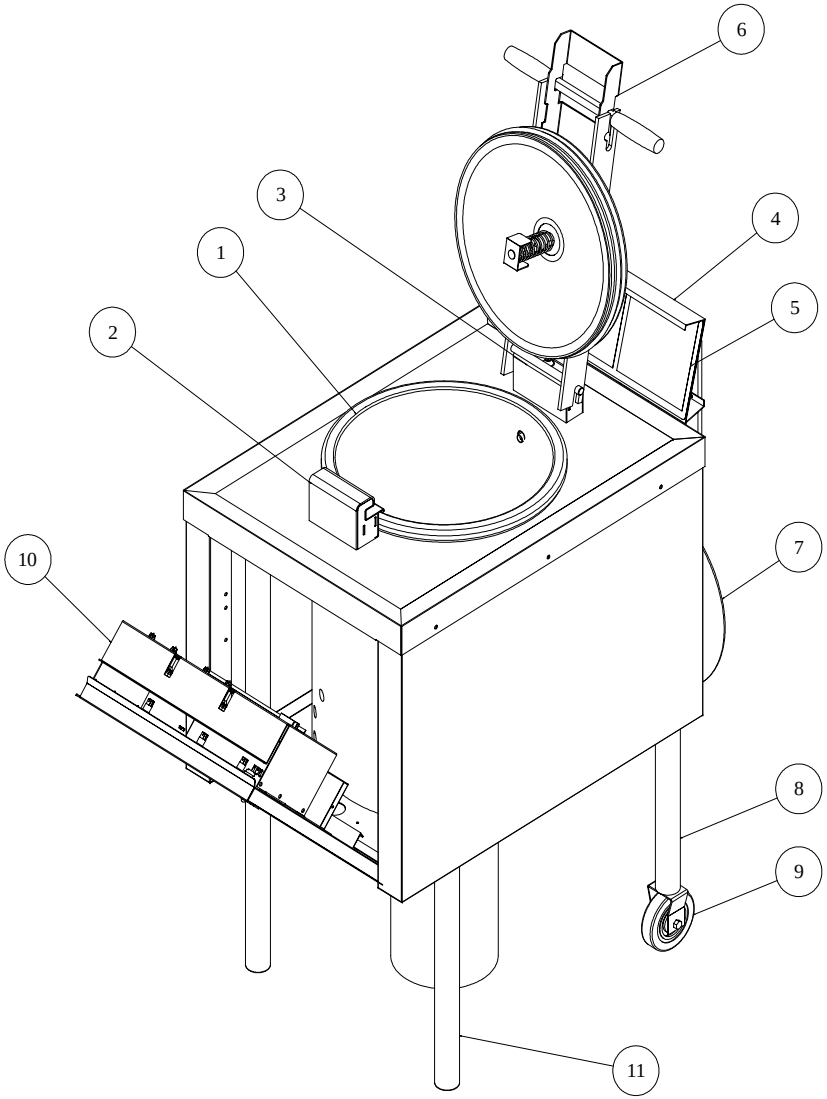
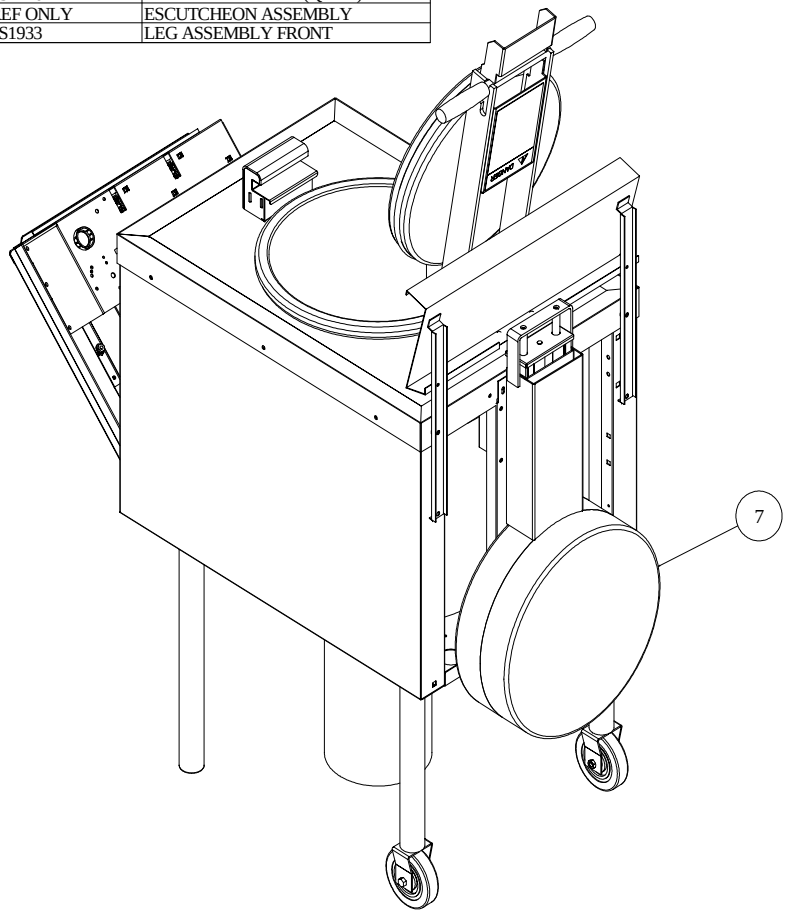
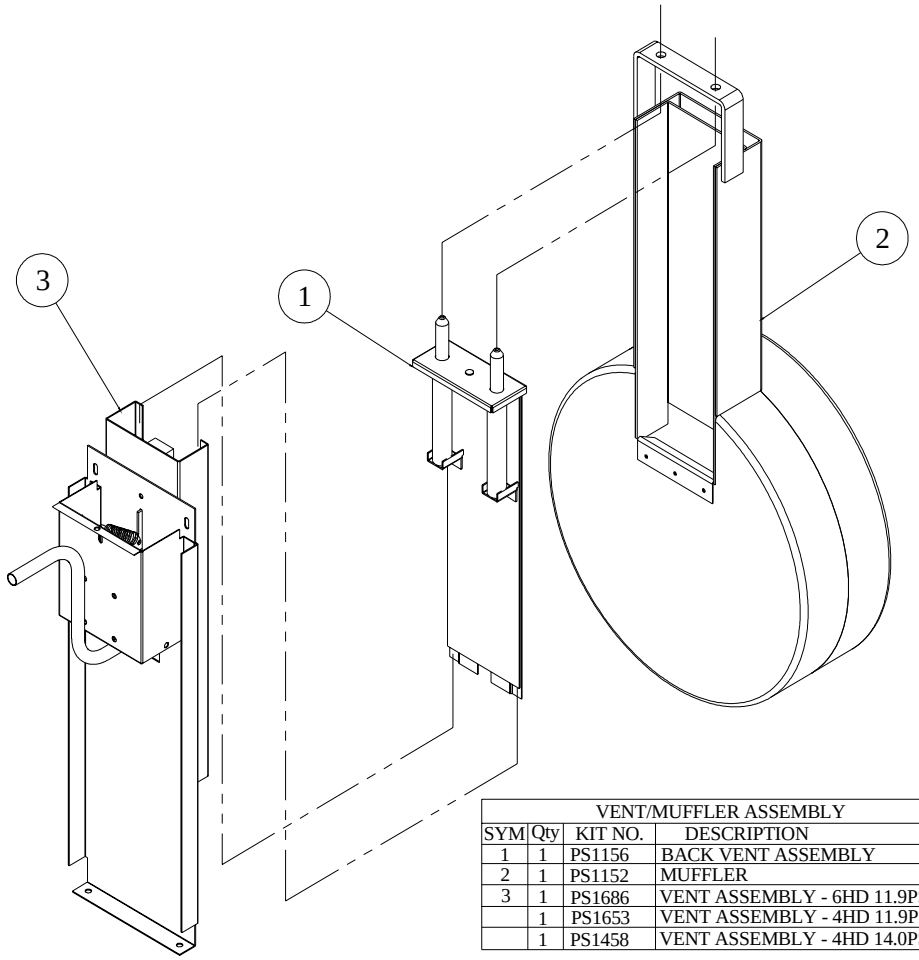
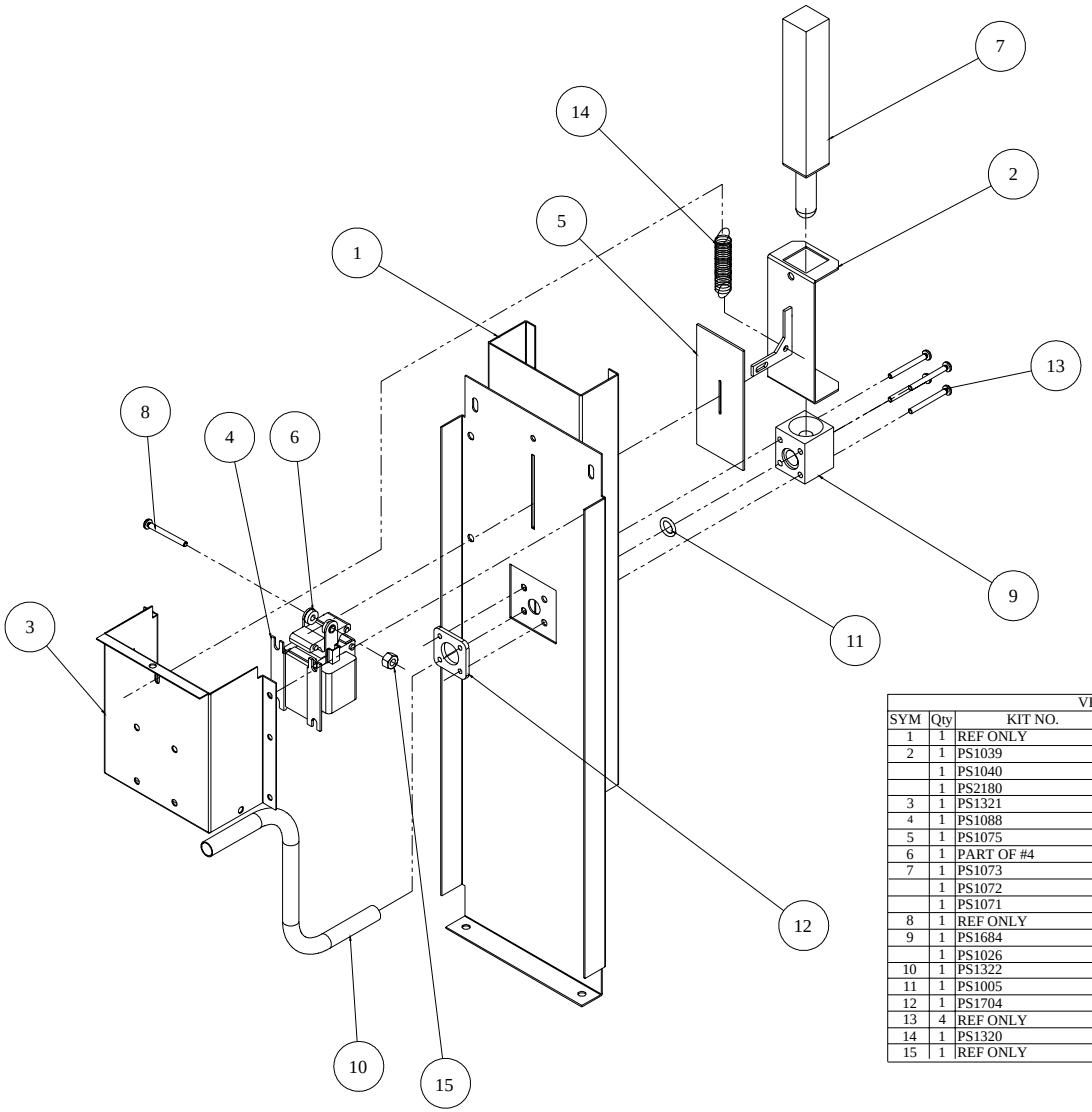


FRYER ASSEMBLY			
SYM.	Qty	KIT NO.	DESCRIPTION
1	1	REF ONLY	POT ASSEMBLY
2	1	PS1399	BLOCK FRONT ASSEMBLY
3	1	PS1400	BLOCK REAR ASM
4	1	PS1210	BACKSPLASH PANEL
5	2	PS1318	BACKSPLASH LABEL
6	1	PS1459	LID ASSEMBLY
7	1	REF ONLY	VENT/MUFFLER ASSEMBLY
8	2	PS1934	LEG ASSEMBLY REAR
9	2	PS1226-2	WHEEL ASSEMBLY (QTY 2)
10	1	REF ONLY	ESCUTCHEON ASSEMBLY
11	1	PS1933	LEG ASSEMBLY FRONT

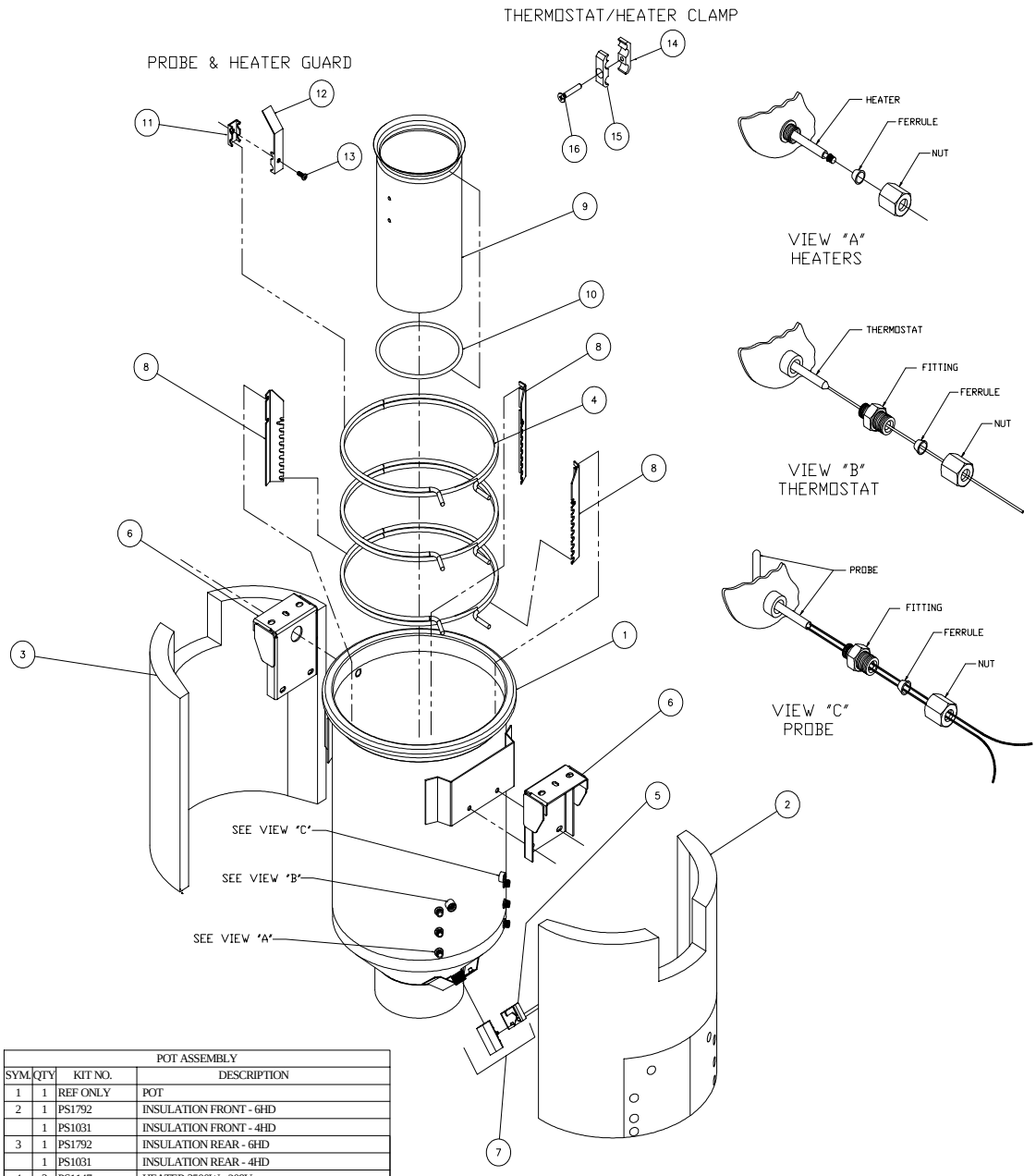




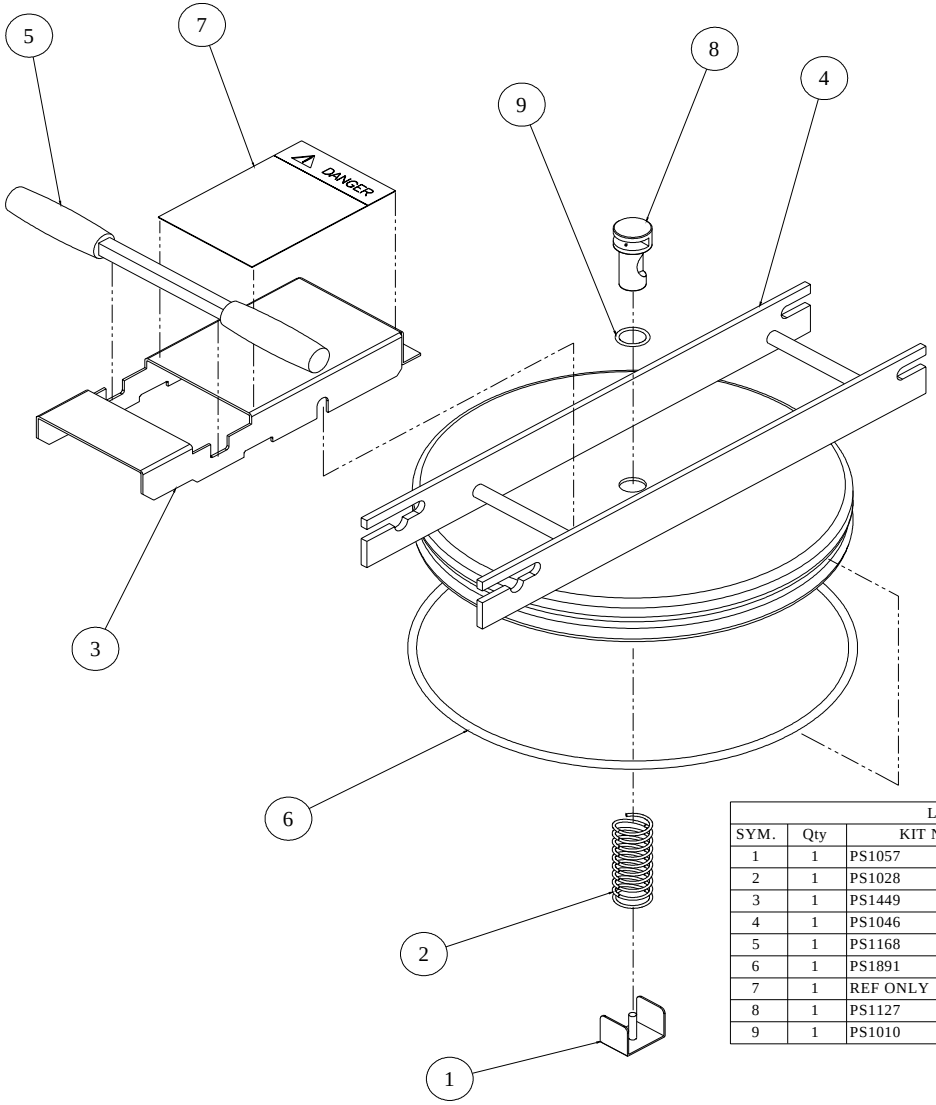
VENT/MUFFLER ASSEMBLY			
SYM	Qty	KIT NO.	DESCRIPTION
1	1	PS1156	BACK VENT ASSEMBLY
2	1	PS1152	MUFFLER
3	1	PS1686	VENT ASSEMBLY - 6HD 11.9PSI
	1	PS1653	VENT ASSEMBLY - 4HD 11.9PSI
	1	PS1458	VENT ASSEMBLY - 4HD 14.0PSI



VENT ASSEMBLY			
SYM	Qty	KIT NO.	DESCRIPTION
1	1	REF ONLY	VENT WELD ASSEMBLY
2	1	PS1039	WEIGHT LIFTER - 6HD 11.9PSI
	1	PS1040	WEIGHT LIFTER - 4HD 11.9PSI
	1	PS2180	WEIGHT LIFTER - 4HD 14.0PSI
3	1	PS1321	BRACKET SOLENOID
4	1	PS1088	SOLENOID
5	1	PS1075	SLIDE
6	1	PART OF #4	SOLENOID TOP (PART OF PS1088)
7	1	PS1073	WEIGHT - 6HD 11.9PSI
	1	PS1072	WEIGHT - 4HD 11.9PSI
	1	PS1071	WEIGHT - 4HD 14.0PSI
8	1	REF ONLY	SCREW 8-32x 1.500
9	1	PS1684	BLOCK VENT - 6HD
	1	PS1026	BLOCK VENT - 4HD
10	1	PS1322	TUBE VENT
11	1	PS1005	O-RING
12	1	PS1704	PLATE NUT VENT
13	4	REF ONLY	SCREW 8-32x 1.75
14	1	PS1320	SPRING VENT
15	1	REF ONLY	NUT NYLON INSERT 8-32

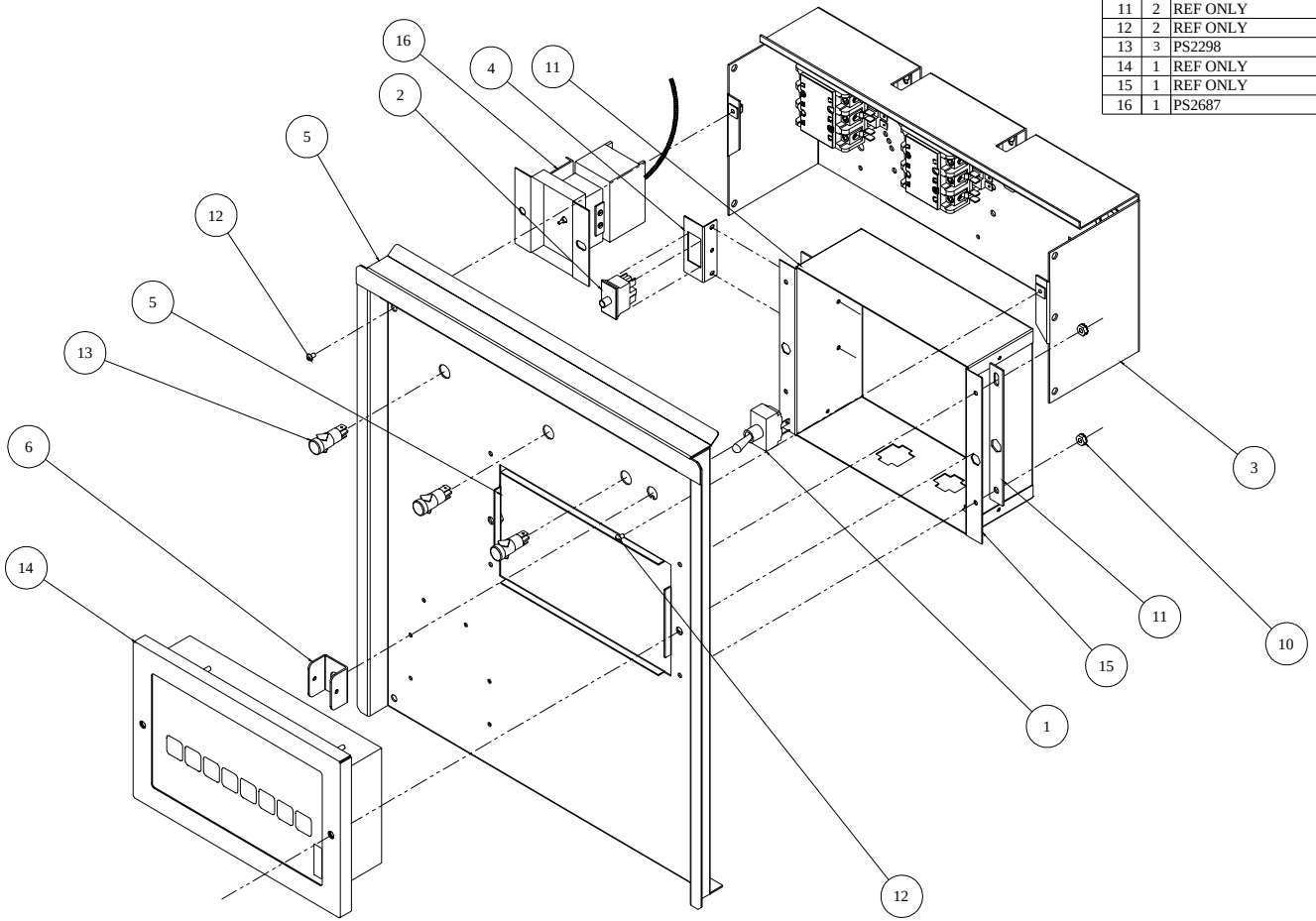


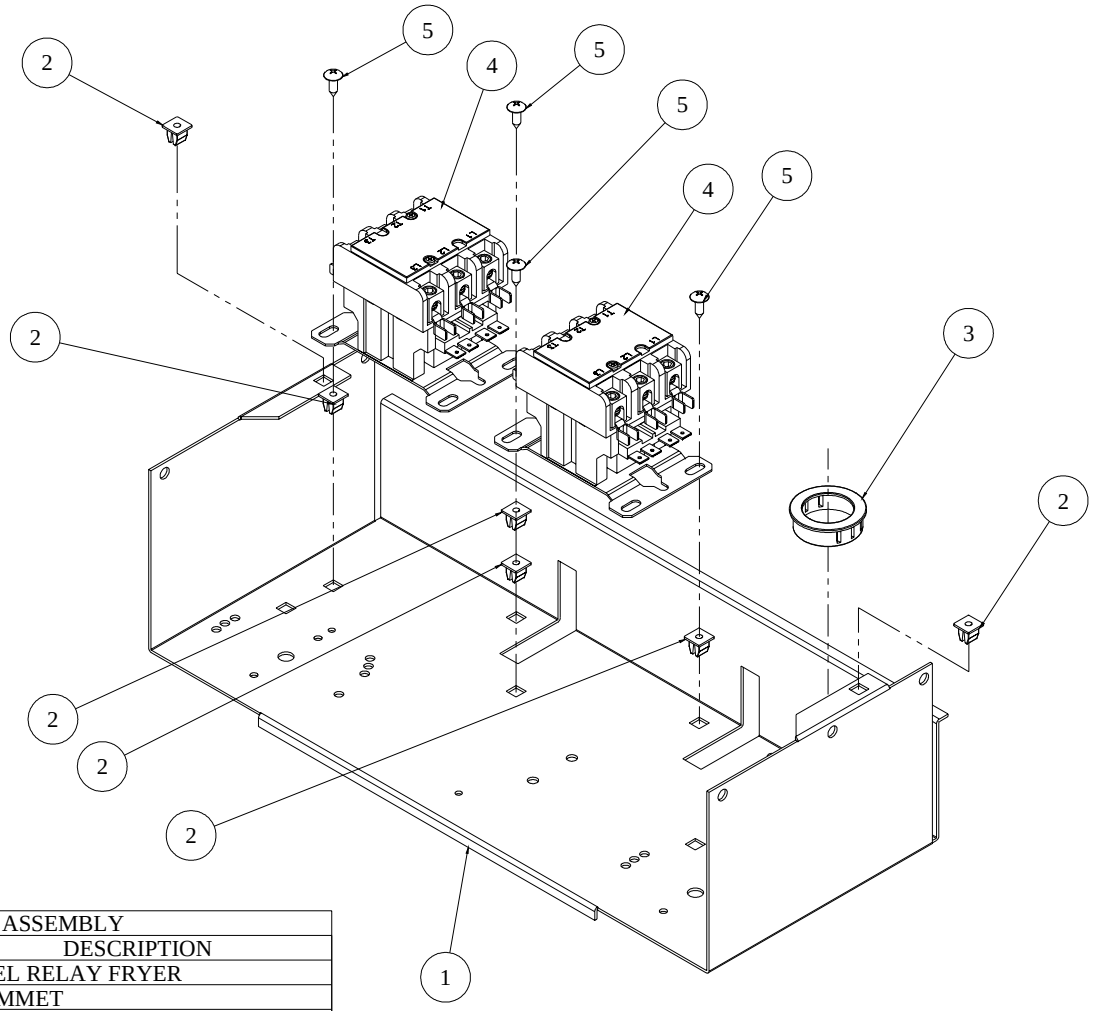
POT ASSEMBLY			
SYM.	QTY	KIT NO.	DESCRIPTION
1	1	REF ONLY	POT
2	1	PS1792	INSULATION FRONT - 6HD
	1	PS1031	INSULATION FRONT - 4HD
3	1	PS1792	INSULATION REAR - 6HD
	1	PS1031	INSULATION REAR - 4HD
4	3	PS1147	HEATER 3500W - 208V
	3	PS1148	HEATER 3500W - 240V
	3	PS2300	HEATER 3500W - 230V
5	1	PS1695	DRAIN VALVE HANDLE ASM
6	2	REF ONLY	BRACKET
7	1	PS1066	VALVE BALL 3/4"
8	3	PS1430	HOLDER HEATER
9	1	PS1207	COLLECTOR - AUSTRALIA
	1	PS1206	COLLECTOR - ALL OTHERS
10	1	PS1892	GASKET COLLECTOR
11	1	PART OF #12	CLAMP PROBE
12	2	PS1744	SHEILD PROBE
13	1	REF ONLY	SCREW
14	1	PS1744	CLAMP BODY
15	1	PART OF #14	PLATE CLAMP
16	1	PART OF #14	SCREW 8-32



LID ASSEMBLY			
SYM.	Qty	KIT NO.	DESCRIPTION
1	1	PS1057	RETAINER ASM
2	1	PS1028	SPRING
3	1	PS1449	LID LOCK
4	1	PS1046	LID BOTTOM LOCK ASM
5	1	PS1168	HANDLE
6	1	PS1891	LID GASKET
7	1	REF ONLY	LABEL LID LOCK "DANGER"
8	1	PS1127	LID VALVE
9	1	PS1010	LID VALVE O-RING

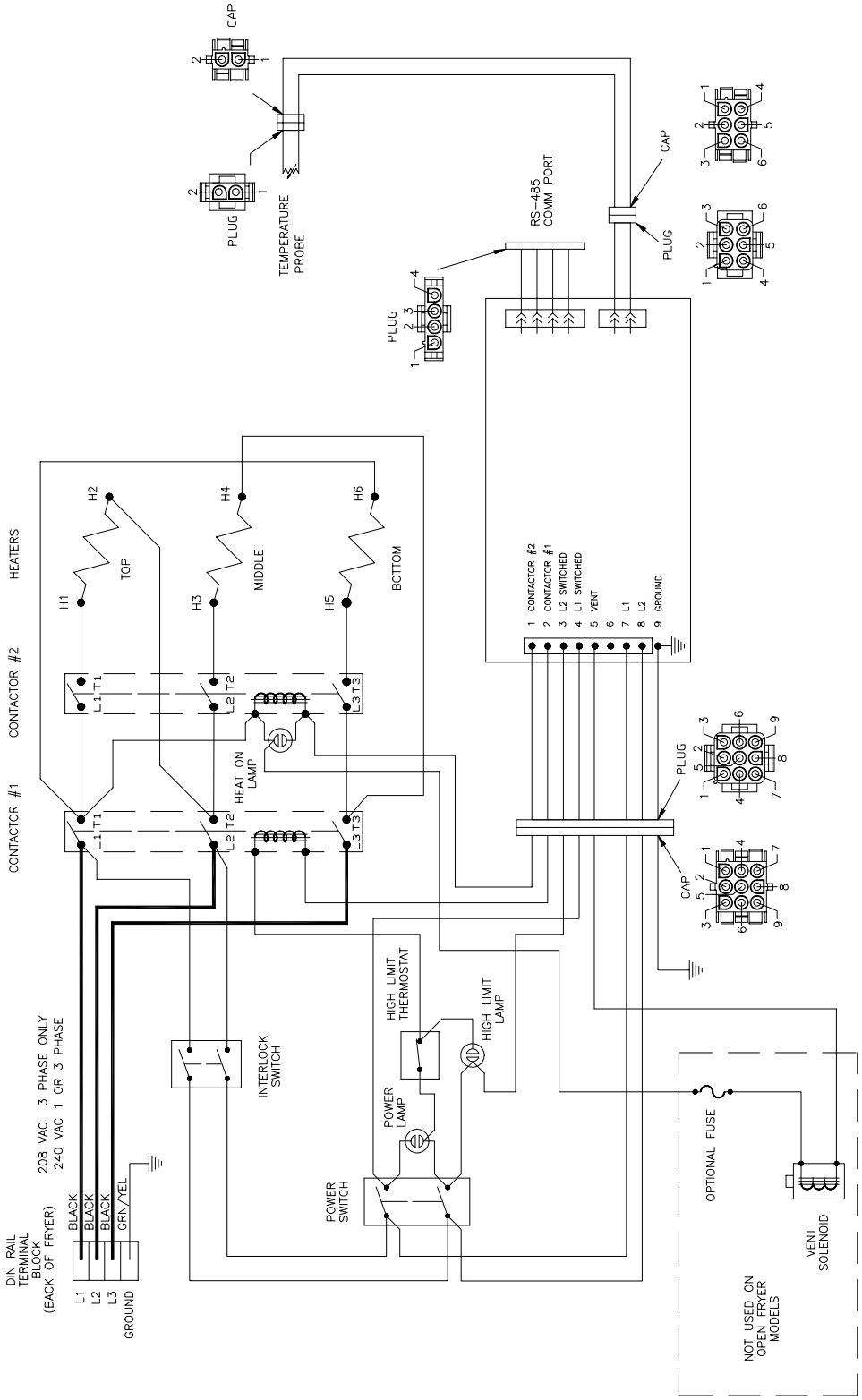
ESCUTCHEON ASSEMBLY			
SYM.	Qty	KIT NO.	DESCRIPTION
1	1	PS1529	SWITCH POWER
2	1	PS2302	SWITCH POWER INTERLOCK
3	1	REF ONLY	RELAY PANEL ASSEMBLY
4	1	REF ONLY	BRACKET SWITCH
5	1	REF ONLY	ESCUTCHEON
6	1	PS1086	GUARD SWITCH
10	4	REF ONLY	NUT KEPS 8-32
11	2	REF ONLY	RETAINER STRIP
12	2	REF ONLY	SCREW 6-32x .313 RD HD PH
13	3	PS2298	LAMP NEON RED
14	1	REF ONLY	CONTROL ASM
15	1	REF ONLY	HOUSING CONTROLS
16	1	PS2687	THERMOSTAT HIGH LIMIT



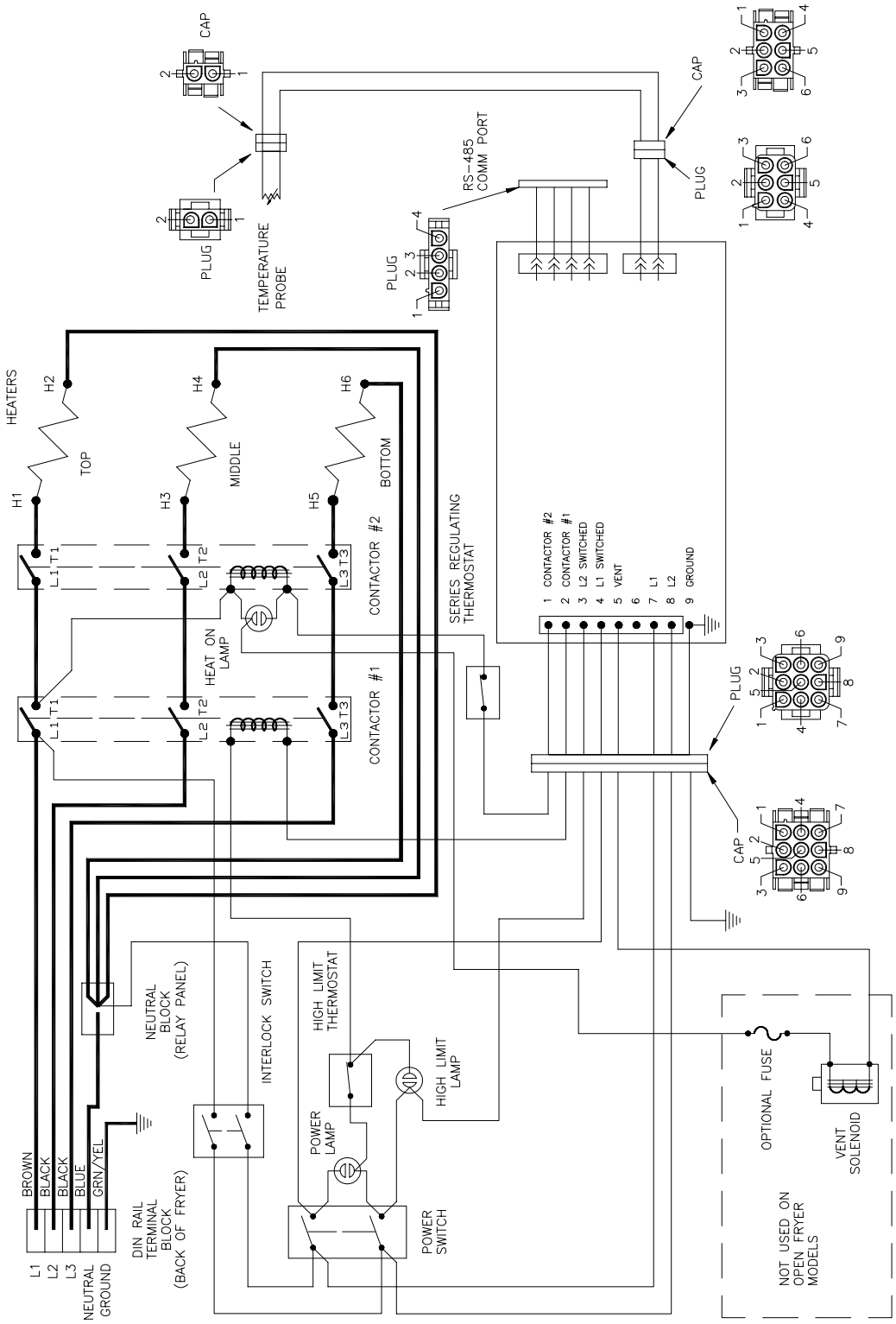


RELAY PANEL ASSEMBLY			
SYM	Qty	KIT NO.	DESCRIPTION
1	1	REF ONLY	PANEL RELAY FRYER
2	6	PS1271	GROMMET
3	1	REF ONLY	BUSHING PANEL 1.375
4	2	PS1007	RELAY - US ONLY
	2	PS2299	RELAY - ALL OTHERS
5	4	REF ONLY	SCREW

DELTA Configuration



WYE Configuration



Winston
Collectramatic Fryer - 'P' Control
Parts Identification Manual

WINSTON PRODUCTS CO.
2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

Lit. #4275R83 - 9/96

WINSTON COLLECTRAMATIC FRYER

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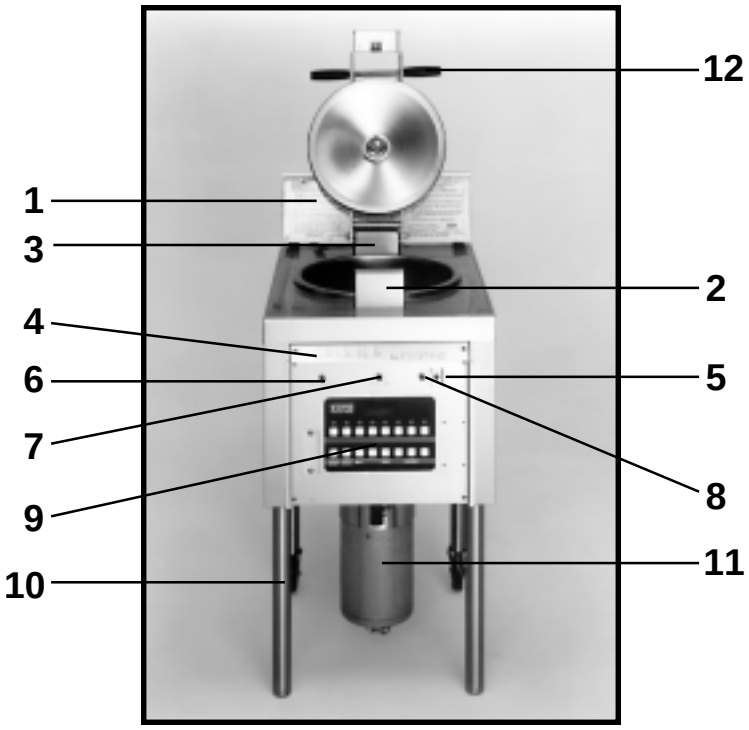
How To Use This Manual

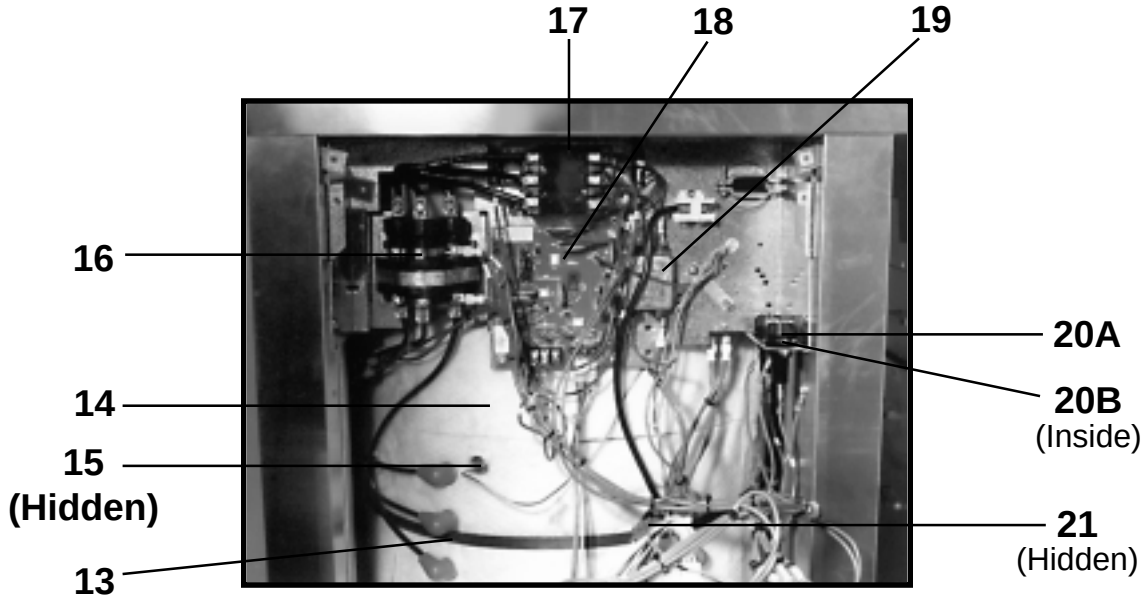
Use Photo Reference (pages 1 - 8) to identify parts. Match Photo Reference numbers with Parts Descriptions and Order Numbers (pages 9 - 13).

WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 6 - 7 for Parts Descriptions and Order Numbers





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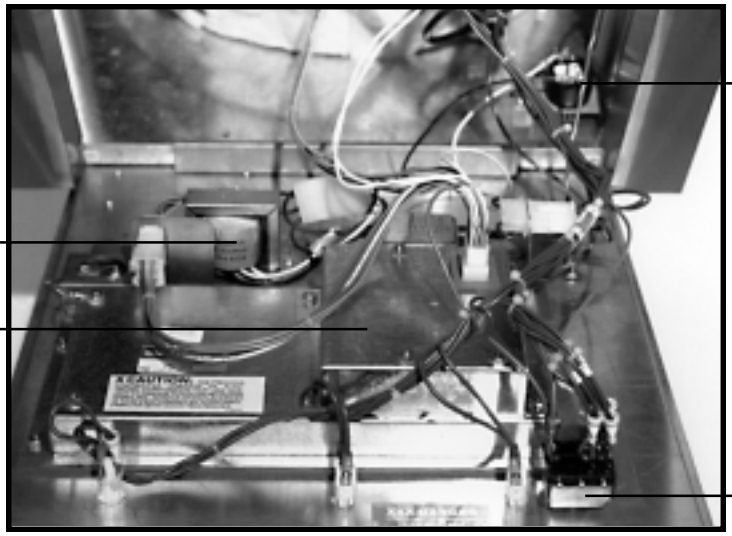
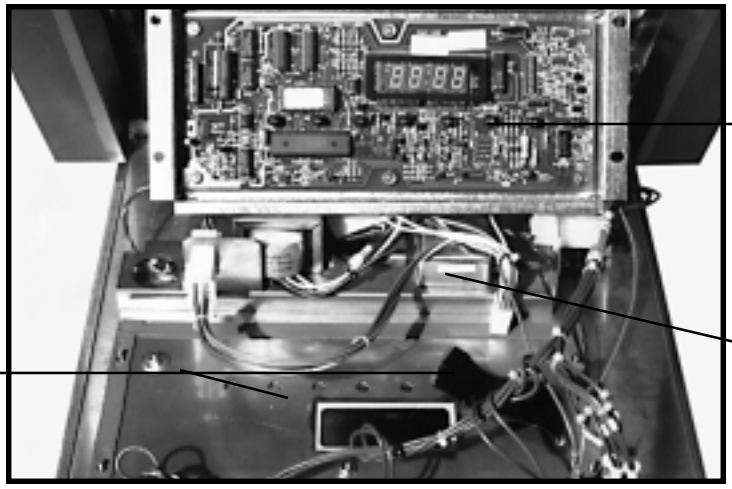
WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 5 for Parts Descriptions and Order Numbers





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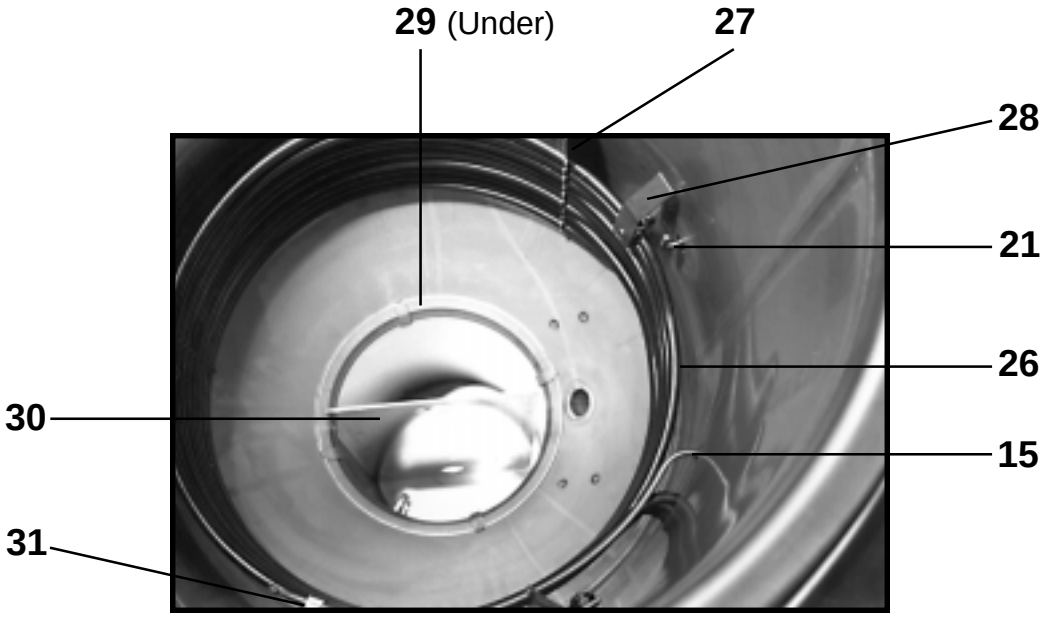
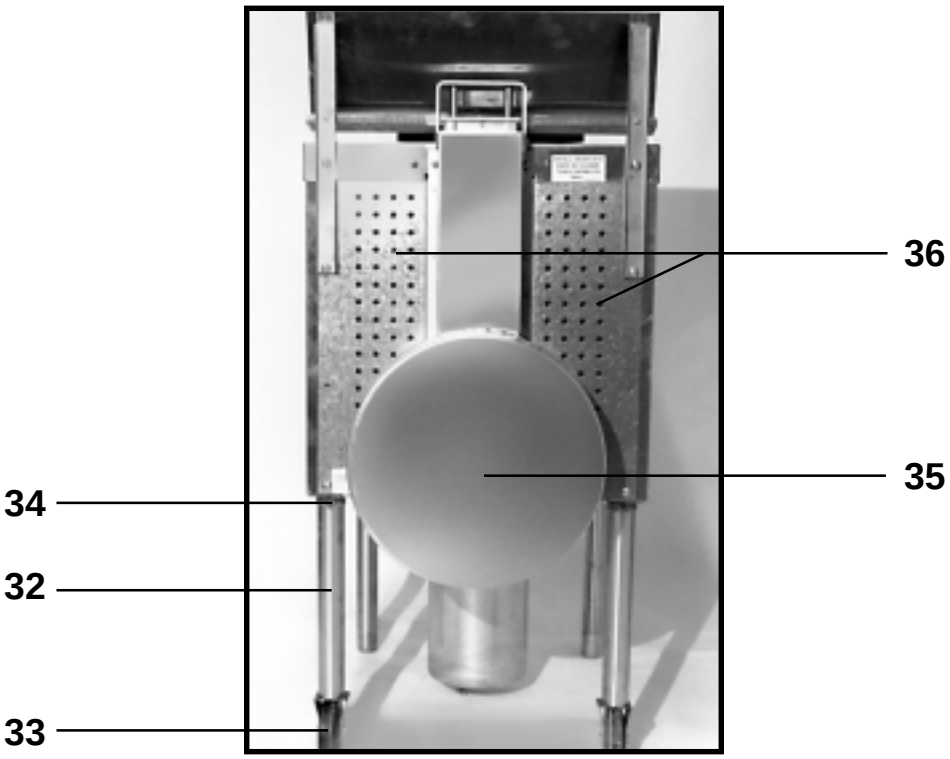
WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 6 - 7 for Parts Descriptions and Order Numbers





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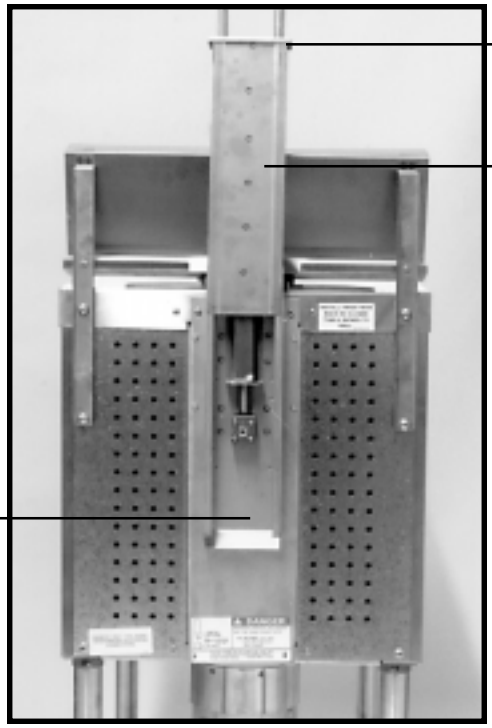
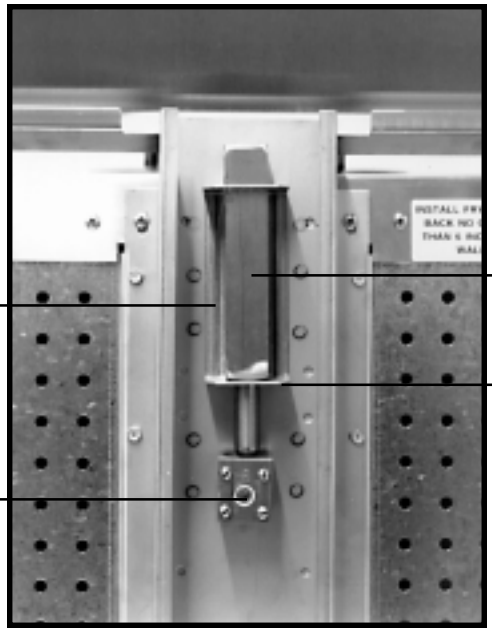
WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 6 - 7 for Parts Descriptions and Order Numbers





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WINSTON COLLECTRAMATIC FRYER

Parts Identification

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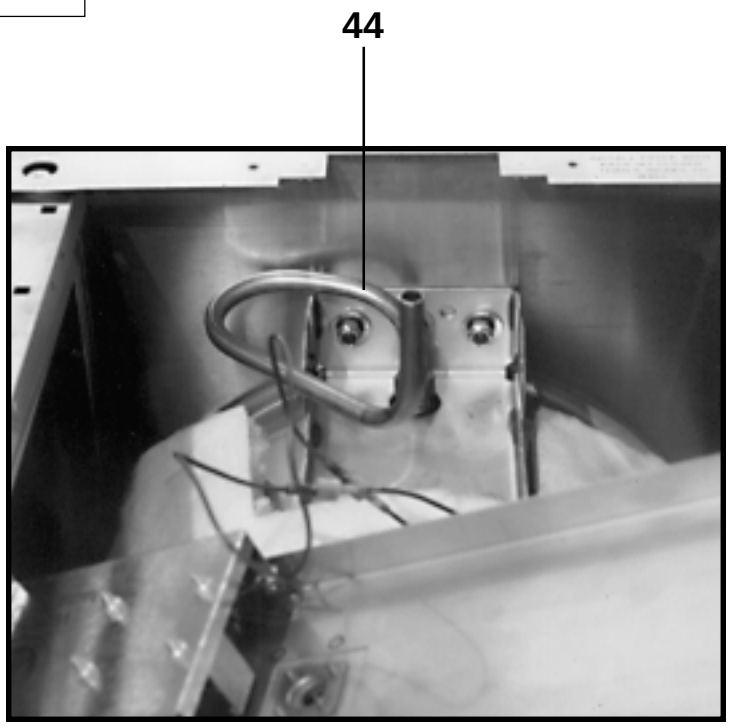
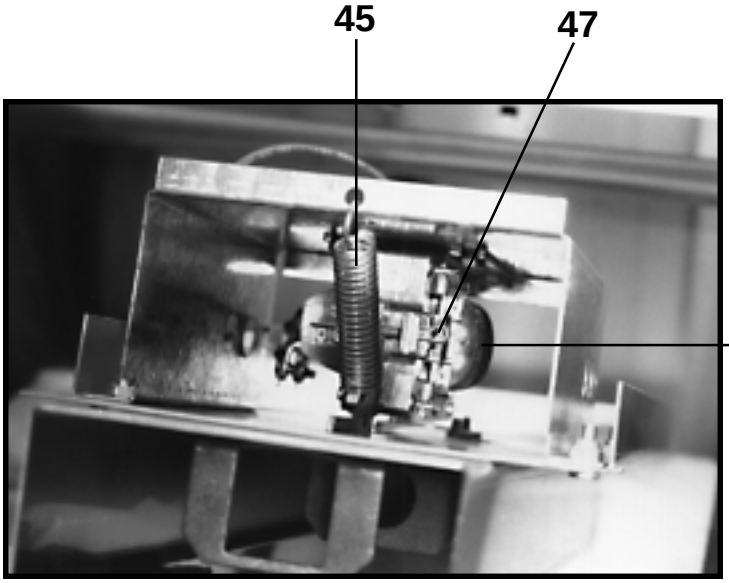
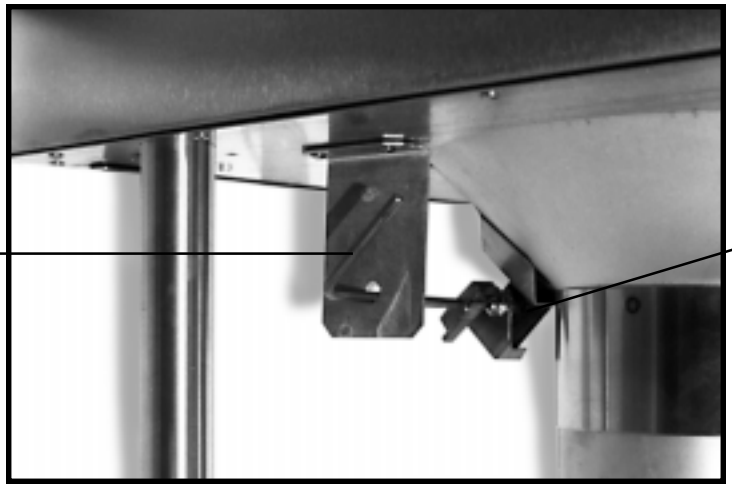


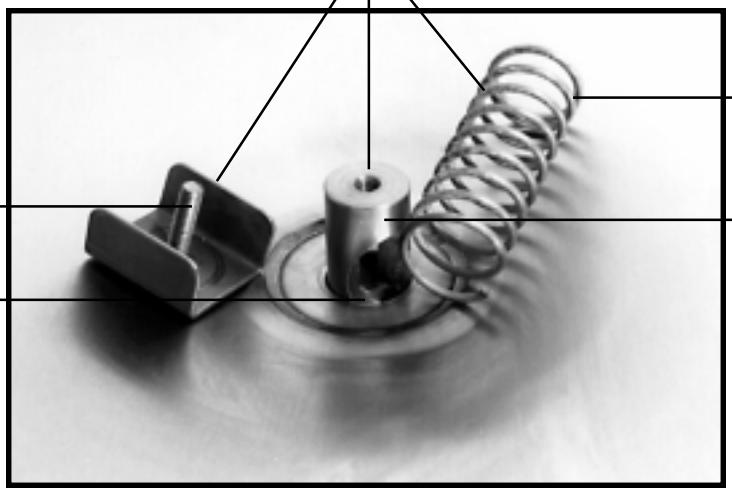


WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 6 - 7 for Parts Descriptions and Order Numbers

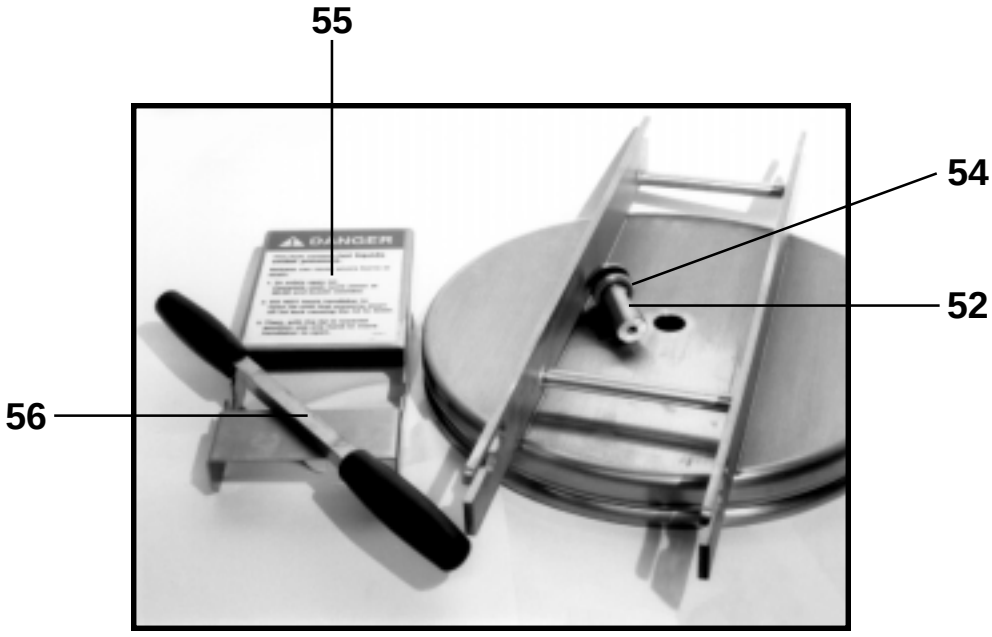


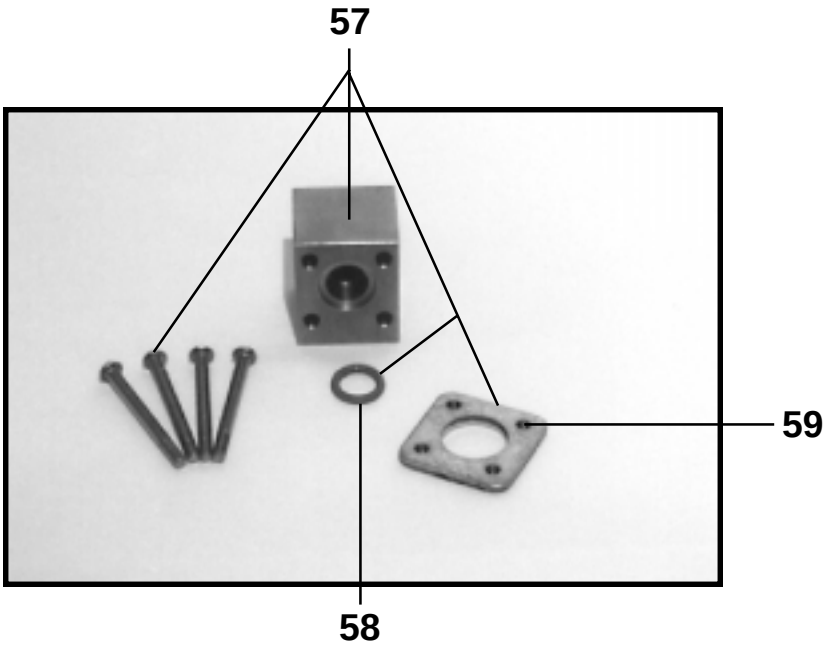


WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 6 - 7 for Parts Descriptions and Order Numbers





WINSTON COLLECTRAMATIC FRYER

Parts Identification

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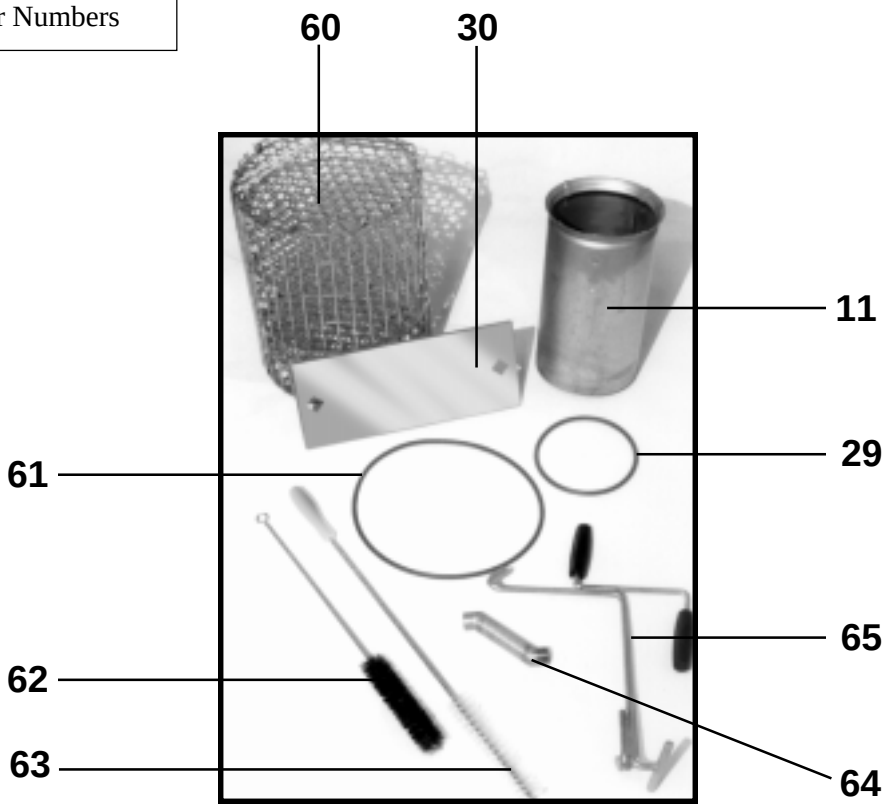

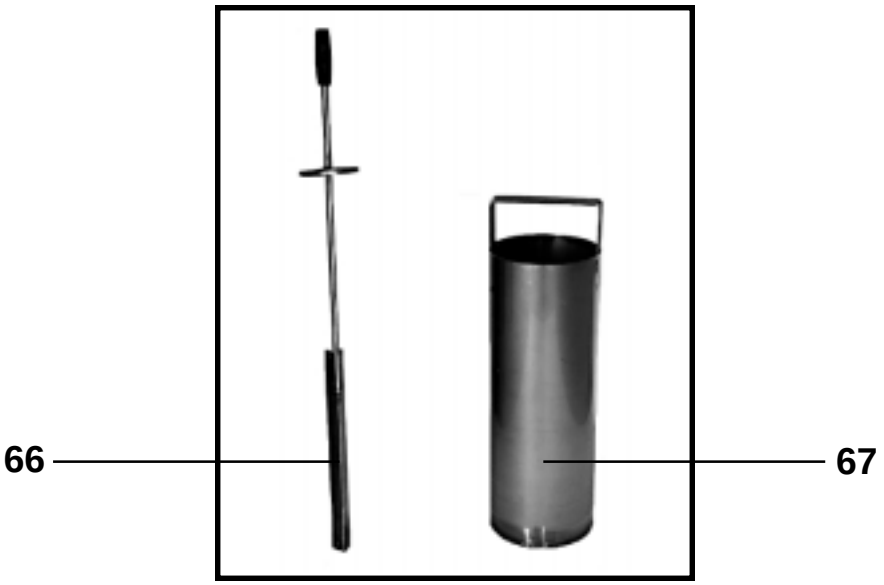

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
1	Danger Panel	PS1210
2	Latch Block *(Front) (Pressure Lock)*	PS1399
3	Hinge Block *(Rear)*	PS1400
4	Eyebrow	PS1134
5	Switch Guard	PS1086
6	Hi Limit Indicator Lamp	PS1012/3
7	Heat On Indicator Lamp	PS1012/3
8	Power On Indicator Lamp	PS1012/3
9	Membrane Panel *(General Market)* Membrane Panel *(KFC)*	PS1748 PS1932
10	Leg Front	PS1933
11	Collector	PS1206
12	Lid Pressure Lock	PS1046
13	Insulation Front Sections *(4 HD & 6 HD)*	PS1986
14	Insulation *(4 HD)* Insulation *(6 HD)*	PS1031 PS1792
15	High Limit Thermostat	PS1184

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WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
16	Mercury Relay	PS1448
17	Electromechanical Relay	PS1007
18	Power Board *(General Market)* Power Board *(KFC)*	PS1800 PS1971
19	EMI Filter	PS1977
20A	Fuse Holder	PS1096/2
20B	Fuse	PS1095/6
21	Thermister Probe	PS2040
22	Buzzer	PS1586
23	Transformer	PS1687
24	Computer *(General Market)* Computer *(KFC)*	*Ref. Only* *Ref. Only*
25	On/Off Switch *(General Market)* On/Off Switch *(KFC)*	PS1529 PS1970
26	Heater *(208 Volt), (380 Volt)* Heater *(240 Volt), (416 Volt)*	PS1147 PS1148
27	Heater Holder	PS1430
28	Probe Guard	PS1744

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WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
29	Collector Gasket	PS1892/3
30	Heat Plate	PS1034
31	High Limit Thermostat Clamp	PS1312
32	Leg Rear With Wheel	PS1934
33	Wheel Assembly	PS1226/2
34	Leg Clamp Assembly	PS1621
35	Muffler	PS1152
36	Back Panel *(4 HD)*	PS1697
	Back Panel *(6 HD)*	PS1698
37	Vent Back Cap	PS1729
38	Vent Back Assembly	PS1156
39	Vent Assembly *(4 HD) - GM*	PS1653
	Vent Assembly *(4 HD) - KFC Dom.*	PS1458
	Vent Assembly *(6 HD)*	PS1686
40	Weight *(4 HD) (14 PSI) - KFC Dom.*	PS1071
	Weight *(4 HD) (11.9 PSI) - GM*	PS1072
	Weight *(6 HD) (11.9 PSI)*	PS1073
Note: *When identifying correct weight for ordering, read PSI engraved on weight lifter.*		
41	Weight Lifter *(4 HD) (14 PSI)*	PS1039
	Weight Lifter *(4 HD) (11.9 PSI)*	PS1040
	Weight Lifter *(6 HD) (11.9 PSI)*	PS1073

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WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
42	Teflon Slide	PS1075/3
43	Vent Block Assembly *(4 HD)*	PS1026
	Vent Block Assembly *(6 HD)*	PS1684
44	Vent Tube *(4 HD)*	PS1322
	Vent Tube *(6 HD)*	PS1678
45	Vent Solenoid Spring	PS1320/3
46	Vent Solenoid	PS1088
47	Vent Solenoid Cotter Pin	PS1121/3
48	Drain Valve	PS1066
49	Drain Valve Handle	PS1695
50	Lid Valve Assembly	PS1127
51	Lid Valve Spring	PS1028/3
52	Lid Valve Body	*Ref. Only*
53	Lid Valve Retainer	PS1057
54	Lid Valve O' Ring	PS1010/3
55	Lid Lock *(Pressure Lock)*	PS1449
56	Handle Bar *(Pressure Lock)*	PS1168

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WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
57	Vent Block Assembly *(4 HD)* Vent Block Assembly *(6 HD)*	PS1026 PS1684
58	Vent Tube O'Ring	PS1005/3
59	Vent Block Nut Plate	PS1704/6
60	Clamshell Basket *(4 HD)* Clamshell Basket *(6 HD)*	PS1159 PS1163
61	Lid Gasket	PS1891/3/12/50
62	Black Nylon Brush	PS1025/1
63	White Teflon Brush	PS1120/1/12
64	Drain Valve Extension	PS1211
65	Drain Hook With Handles	PS1154/1/6
66	Plugging Tool	PS1179/1
67	Displacer Tool	PS1209/1

NOTE: See pages 1 - 8 for Photo Reference

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Winston Products International, Ltd.
Collectramatic Fryer - 'P' Control

International Parts Identification Manual

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Products International, Ltd.

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WINSTON COLLECTRAMATIC FRYER

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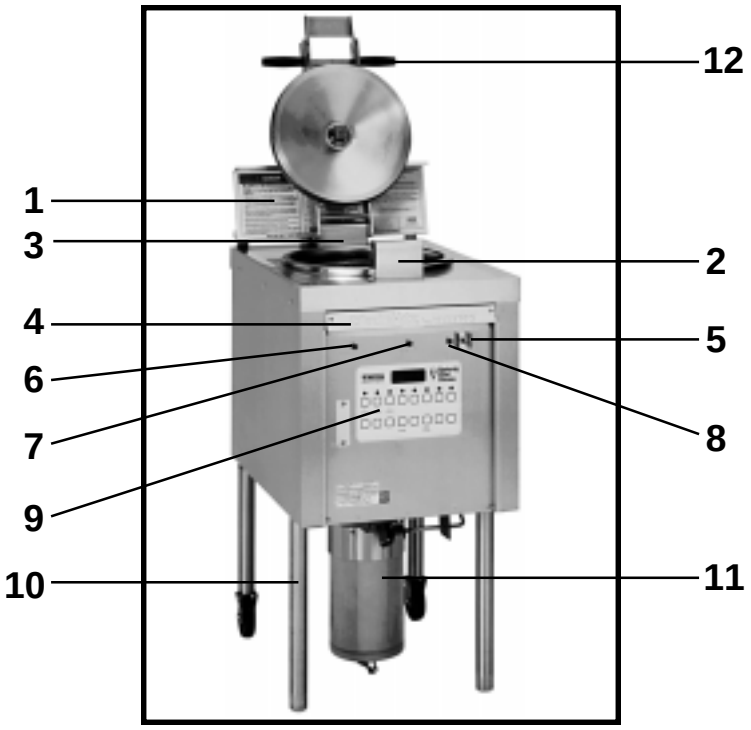
How To Use This Manual

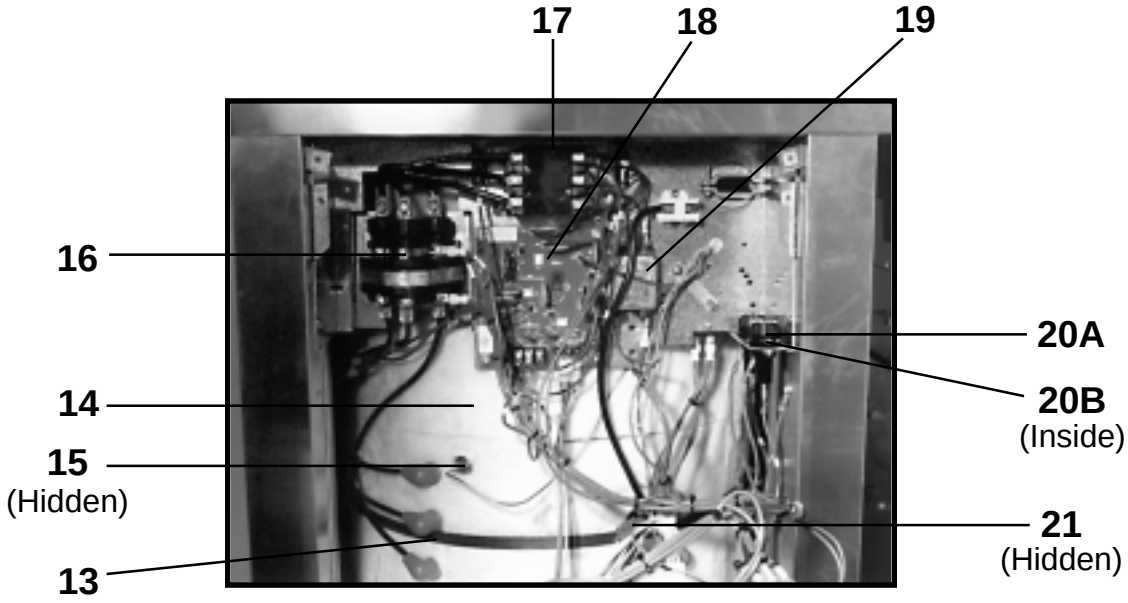
Use Photo Reference (pages 1 - 8) to identify parts. Match Photo Reference numbers with Parts Descriptions and Order Numbers (pages 9 - 13).

WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 9 - 13 for Parts Descriptions and Order Numbers



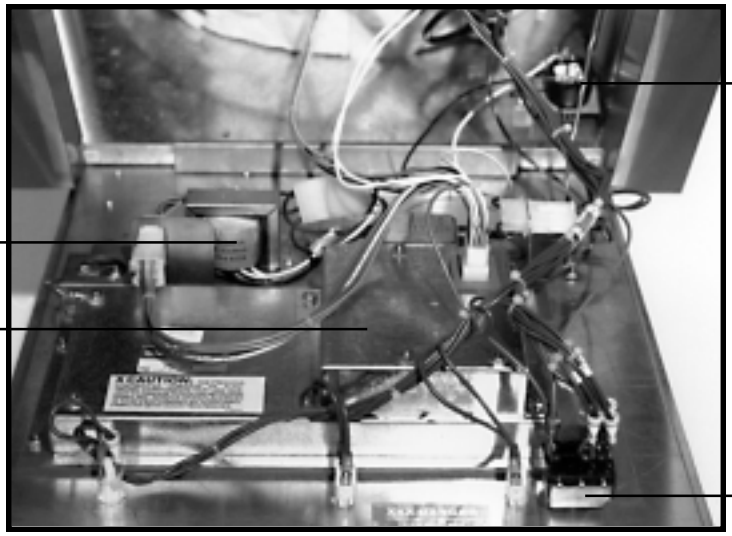


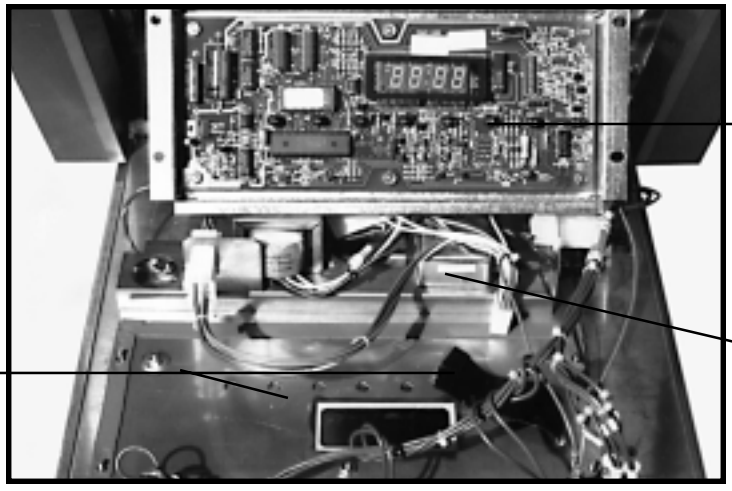
Winston Products International, Ltd.

WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 9 - 13 for Parts Descriptions and Order Numbers

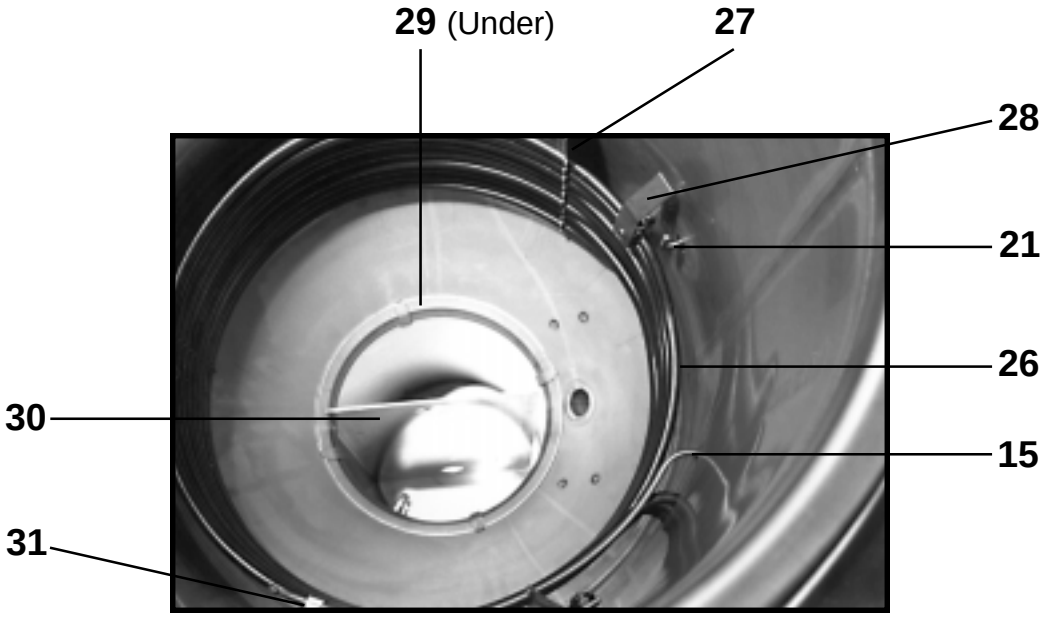


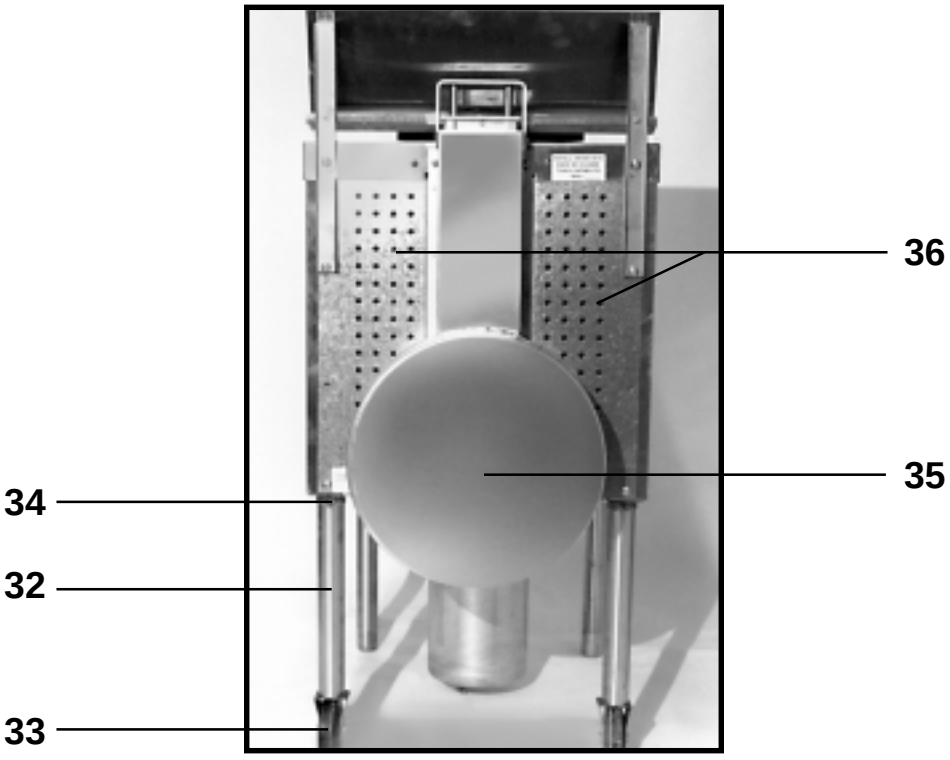


WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 9 - 13 for Parts Descriptions and Order Numbers





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WINSTON COLLECTRAMATIC FRYER

Parts Identification

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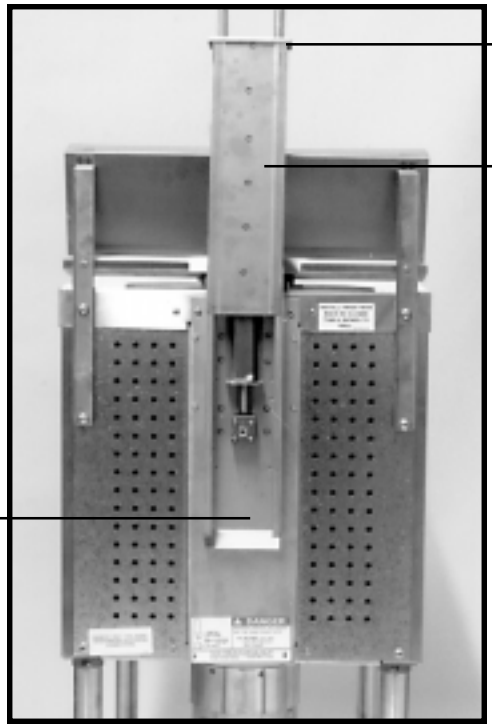
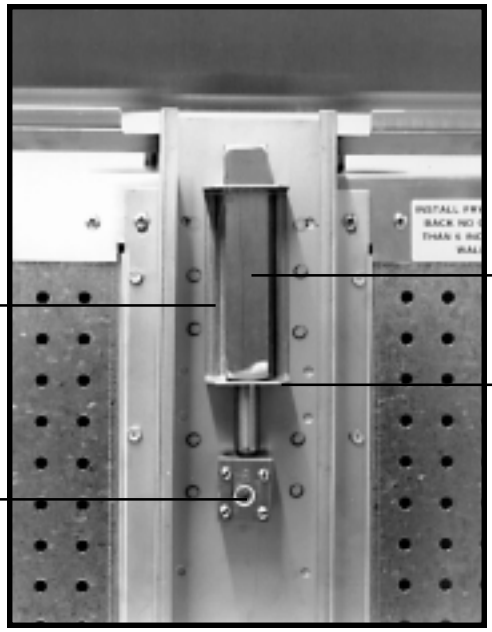


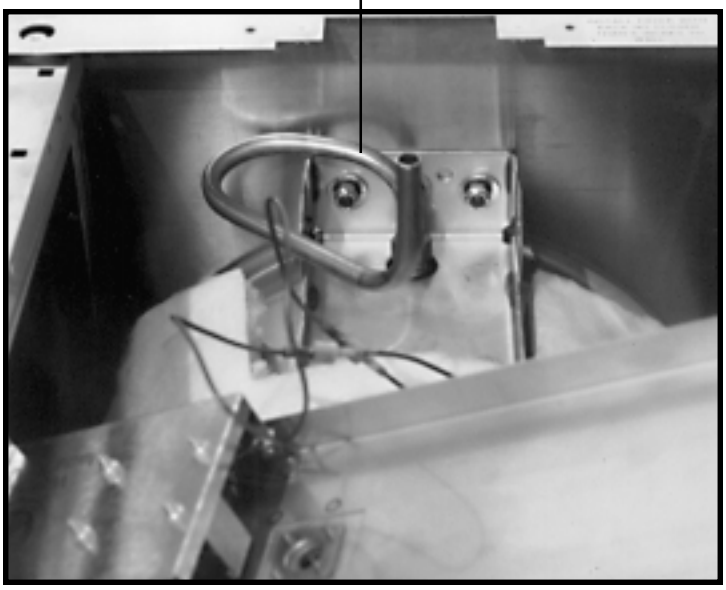


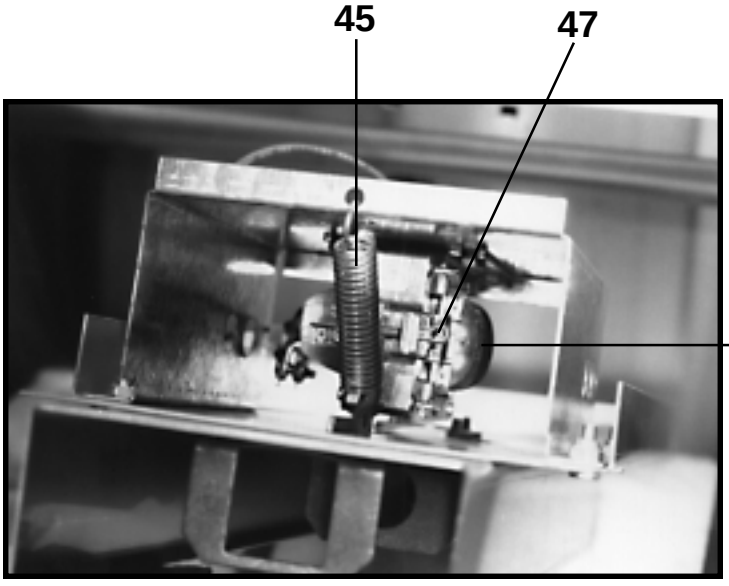
Winston Products International, Ltd.

WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 9 - 13 for Parts Descriptions and Order Numbers

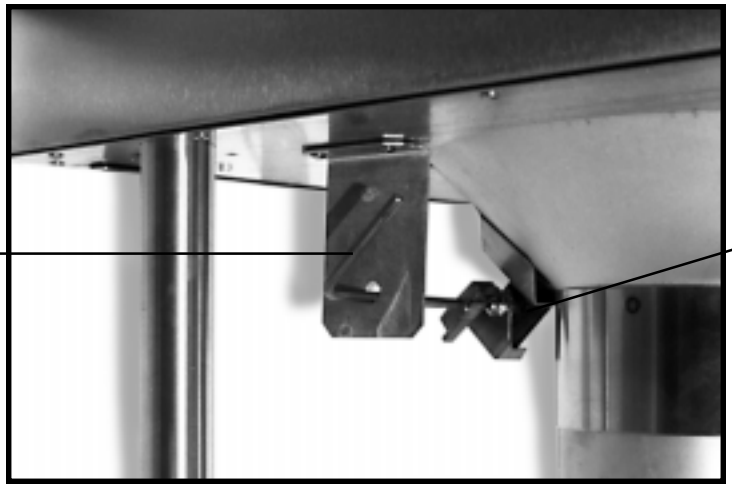


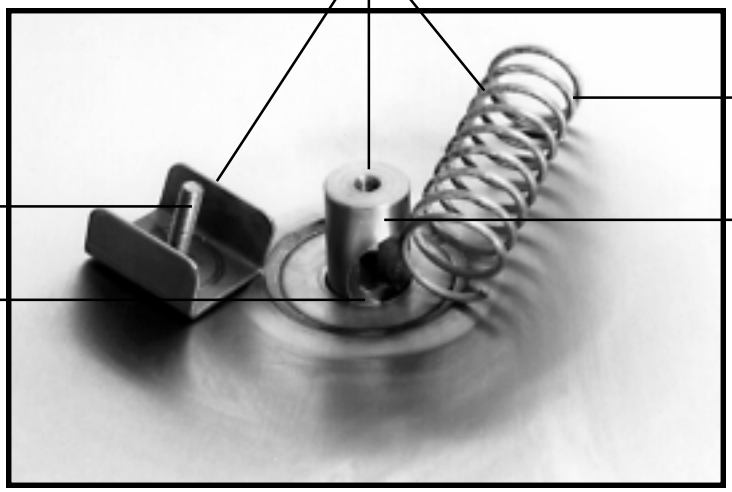


WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 9 - 13 for Parts Descriptions and Order Numbers

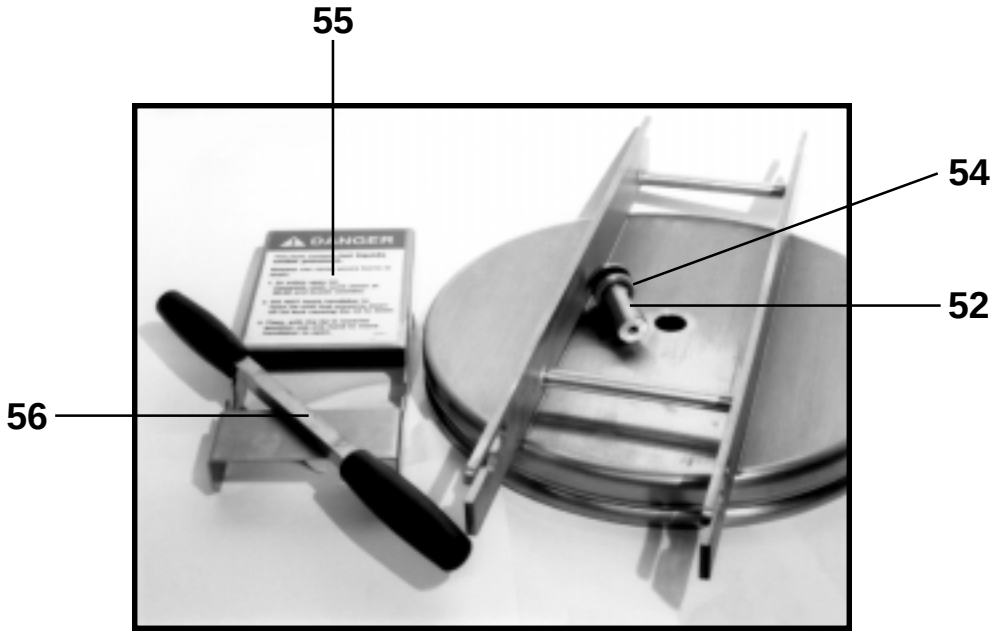


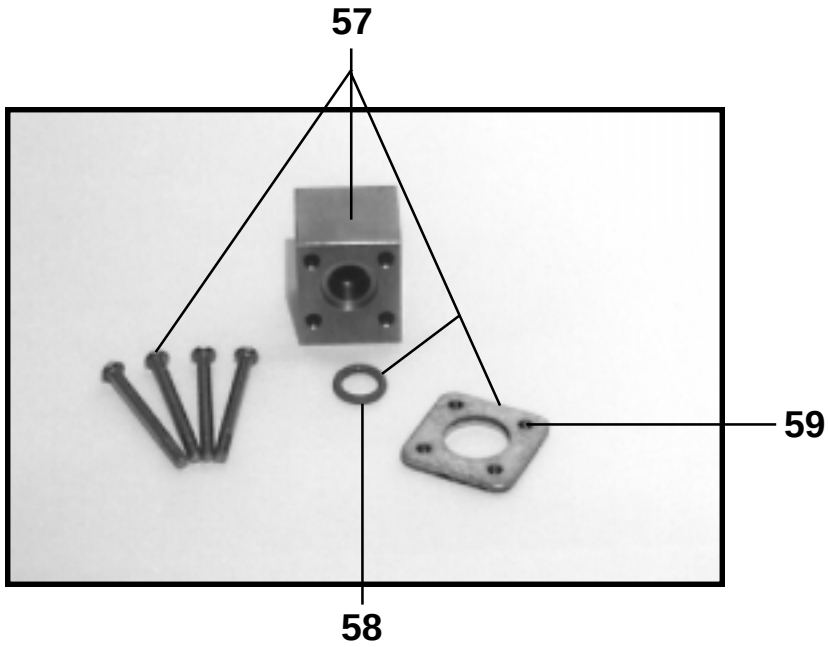


WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See page 9 - 13 for Parts Descriptions and Order Numbers





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Parts Identification

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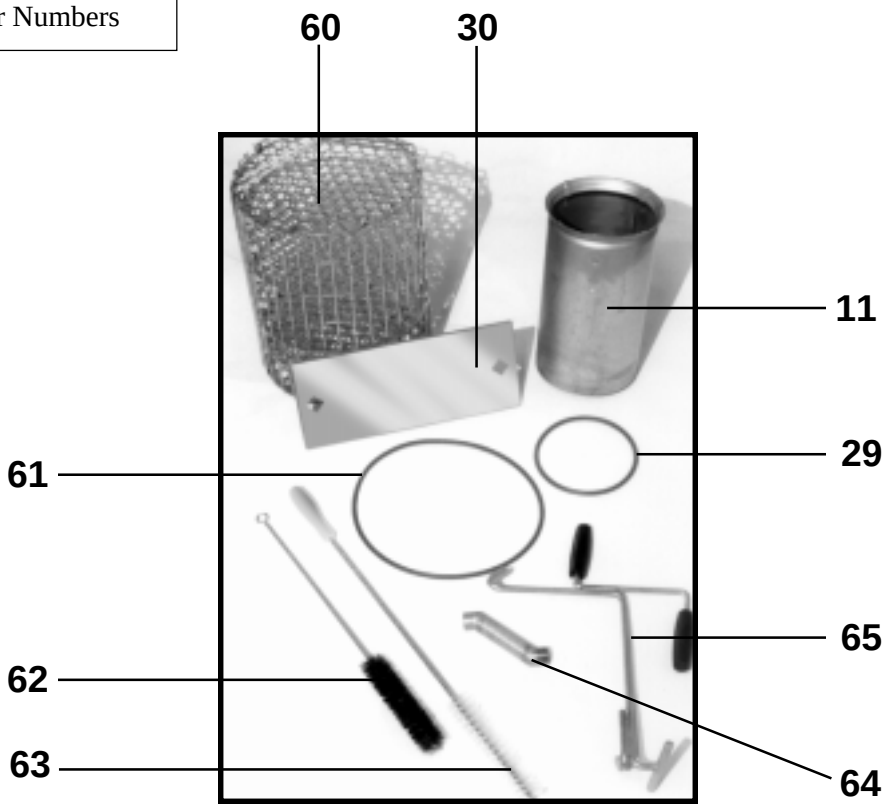

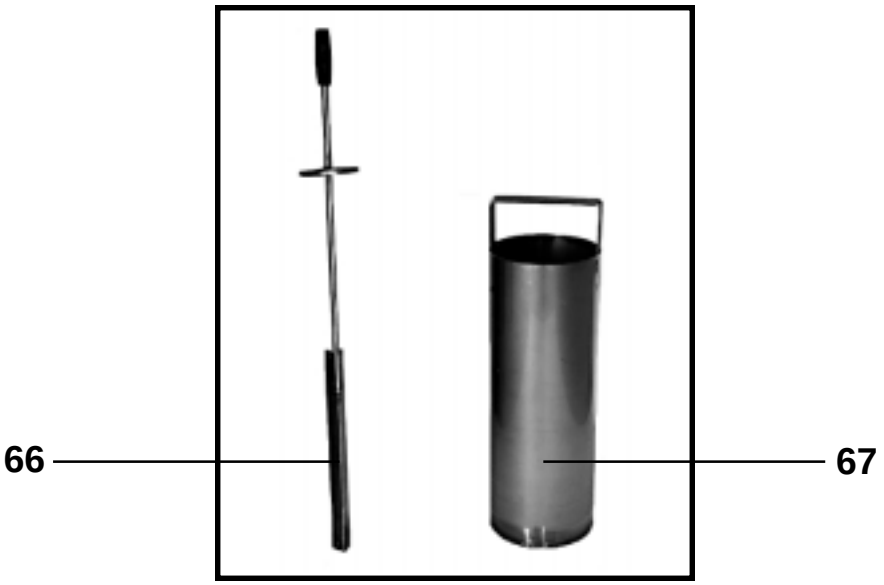

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
1	Danger Panel	PS1210
2	Latch Block *(Front) (Bottom Lock)*	PS1399
3	Hinge Block *(Rear)*	PS1400
4	Eyebrow	PS1134
5	Switch Guard	PS1086
6	Hi Limit Indicator Lamp	PS1012/3
7	Heat On Indicator Lamp	PS1012/3
8	Power On Indicator Lamp	PS1012/3
9	Membrane Panel	PS1932
10	Leg Front	PS1933
11	Collector	PS1206
12	Lid Bottom Lock	PS1046
13	Insulation Front Sections *(4 HD & 6 HD)*	PS1986
14	Insulation *(4 HD)* Insulation *(6 HD)*	PS1031 PS1792
15	High Limit Thermostat	PS1184

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
16	Mercury Relay	PS1448
17	Electromechanical Relay	PS2157
18	Power Board	PS1971
19	EMI Filter	PS1977
20A	Fuse Holder	PS1096/2
20B	Fuse	PS1095/6
21	Thermister Probe	PS2040
22	Buzzer	PS1586
23	Transformer	PS1687
24	Process Controller	*Ref. Only*
25	On/Off Switch	PS1970
26	Heater *(208 Volt), (380 Volt)* Heater *(240 Volt), (416 Volt)*	PS1147 PS1148
27	Heater Holder	PS1430
28	Probe Guard	PS1744
29	Collector Gasket	PS1892/3

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
30	Heat Plate	PS1034
31	High Limit Thermostat Clamp	PS1312
32	Leg Rear With Wheel	PS1934
33	Wheel Assembly	PS1226/2
34	Leg Clamp Assembly	PS1621
35	Muffler	PS1152
36	Back Panel *(4 HD)*	PS1697
	Back Panel *(6 HD)*	PS1698
37	Vent Back Cap	PS1729
38	Vent Back Assembly	PS1156
39	Vent Assembly *(4 HD)*	PS1653
	Vent Assembly *(6 HD)*	PS1686
40	Weight *(4 HD) (11.9 PSI)*	PS1072
	Weight *(6 HD) (11.9 PSI)*	PS1073
Note: *When identifying correct weight for ordering, read PSI engraved on weight lifter.*		
41	Weight Lifter *(4 HD) (11.9 PSI)*	PS1040
	Weight Lifter *(6 HD) (11.9 PSI)*	PS1073
42	Teflon Slide	PS1075/3

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
43	Vent Block Assembly *(4 HD)* Vent Block Assembly *(6 HD)*	PS1026 PS1684
44	Vent Tube *(4 HD)* Vent Tube *(6 HD)*	PS1322 PS1678
45	Vent Solenoid Spring	PS1320/3
46	Vent Solenoid	PS1088
47	Vent Solenoid Cotter Pin	PS1121/3
48	Drain Valve	PS1066
49	Drain Valve Handle	PS1695
50	Lid Valve Assembly	PS1127
51	Lid Valve Spring	PS1028/3
52	Lid Valve Body	*Ref. Only*
53	Lid Valve Retainer	PS1057
54	Lid Valve O' Ring	PS1010/3
55	Lid Lock *(Bottom Lock)*	PS1449
56	Handle Bar *(Bottom Lock)*	PS1168

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
57	Vent Block Assembly *(4 HD)* Vent Block Assembly *(6 HD)*	PS1026 PS1684
58	Vent Tube O'Ring	PS1005/3
59	Vent Block Nut Plate	PS1704/6
60	Clamshell Basket *(4 HD)* Clamshell Basket *(6 HD)*	PS1159 PS1163
61	Lid Gasket	PS1891/3/12/50
62	Black Nylon Brush	PS1025/1
63	White Teflon Brush	PS1120/1/12
64	Drain Valve Extension	PS1211
65	Drain Hook With Handles	PS1154/1/6
66	Plugging Tool	PS1179/1
67	Displacer Tool	PS1209/1

NOTE: See pages 1 - 8 for Photo Reference

Lit. #4275R99 - 11/96

Winston
Collectramatic® Fryer
(Surface Mount 'S' controls)
Parts Identification Manual

WINSTON PRODUCTS CO.
2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

Lit. #4275T166 – 8/98

WINSTON COLLECTRAMATIC FRYER

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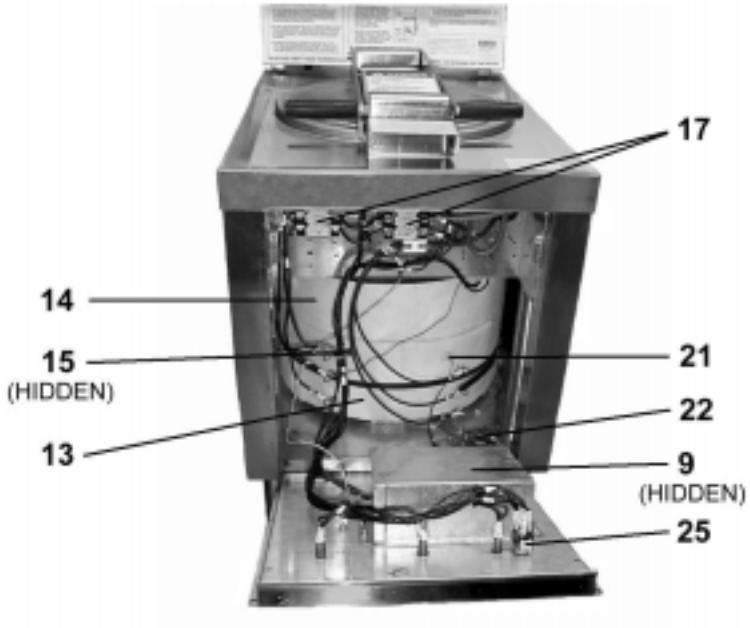
WINSTON COLLECTRAMATIC FRYER

Parts Identification

NOTE: See pages 7 - 10 for Parts Descriptions and Order Numbers



To order parts, contact your Winston representative or call the International office:

Winston Products Co.

(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON COLLECTRAMATIC FRYER

Parts Identification

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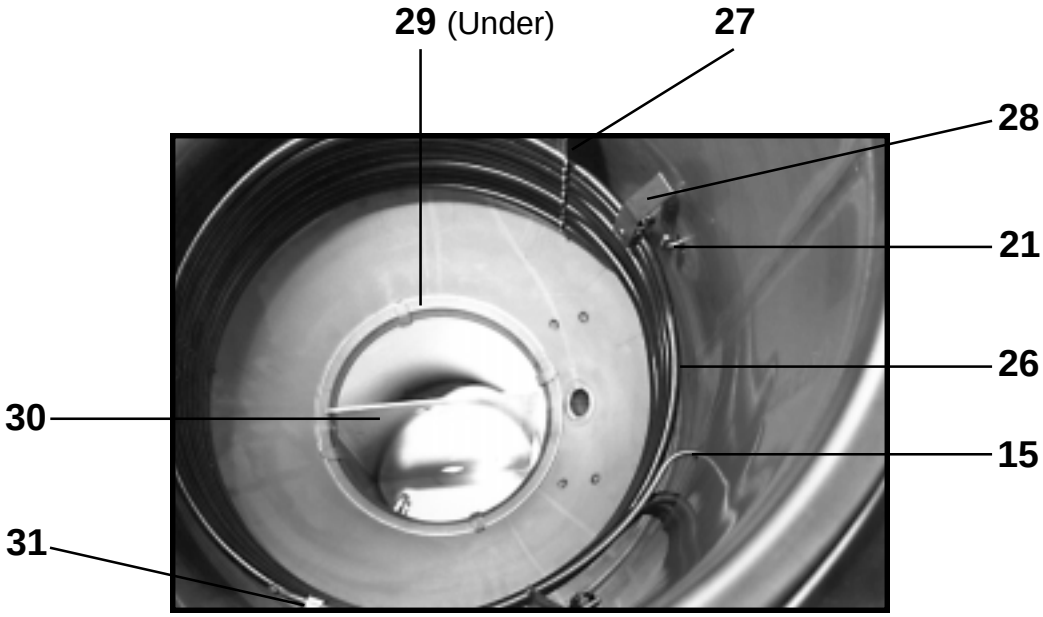

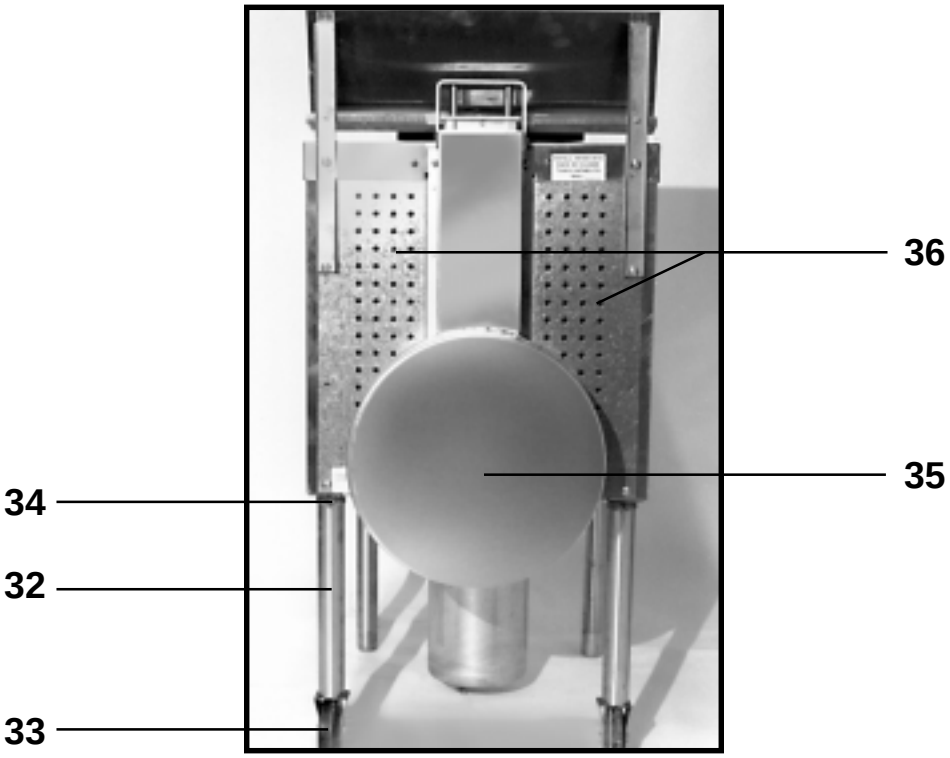

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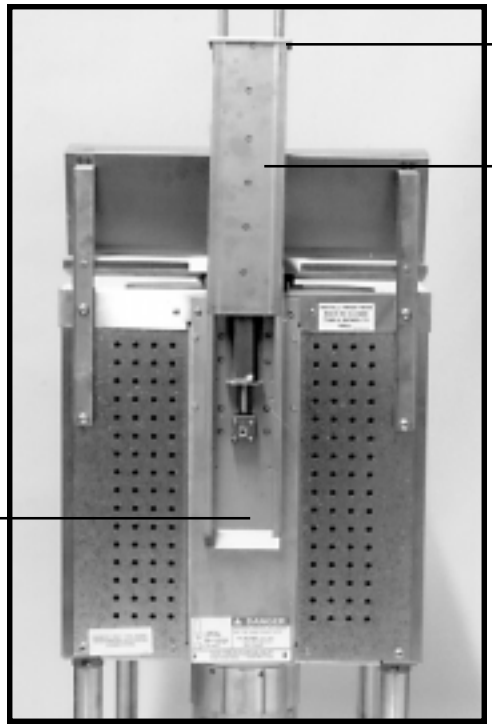

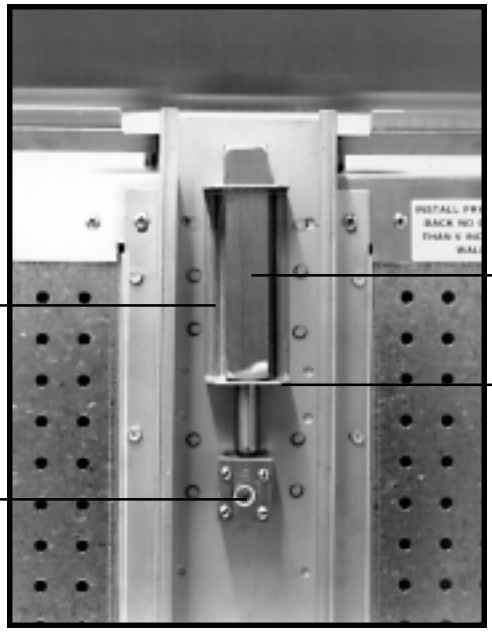

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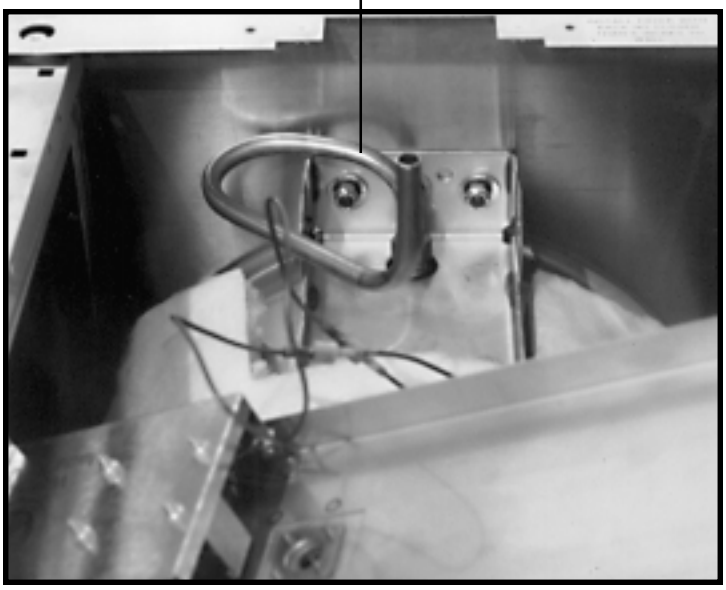

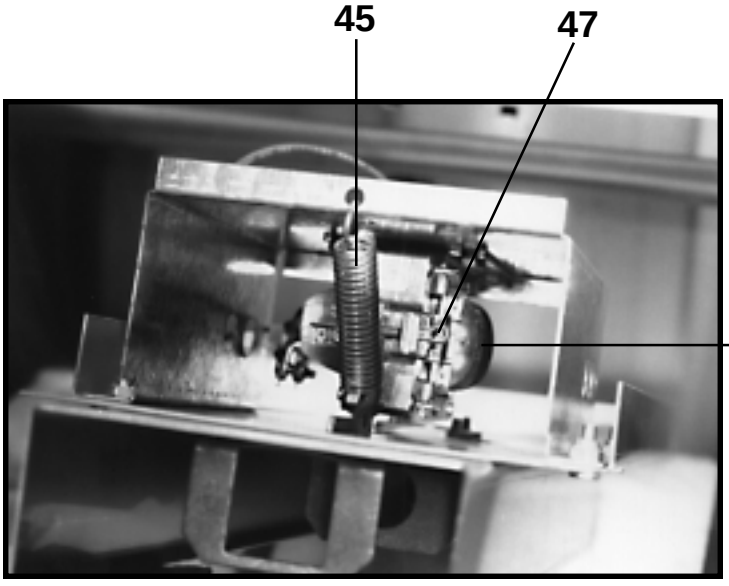

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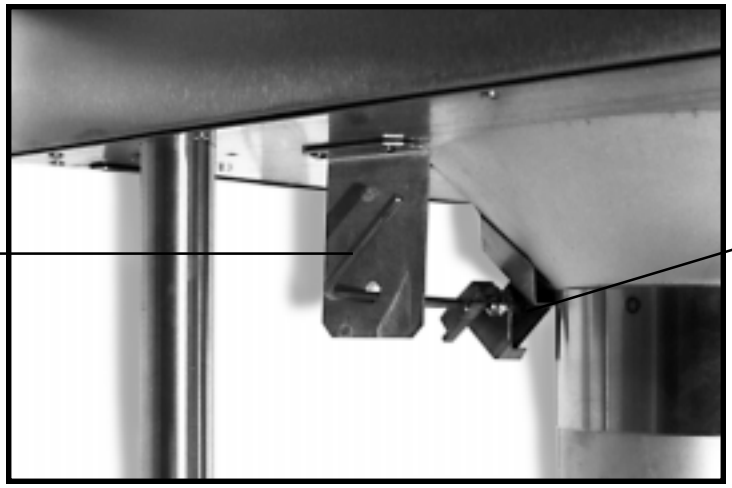

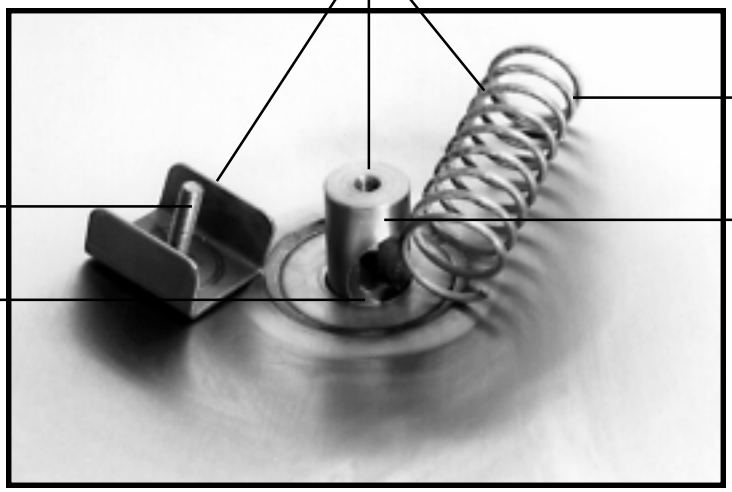

WINSTON COLLECTRAMATIC FRYER

Parts Identification

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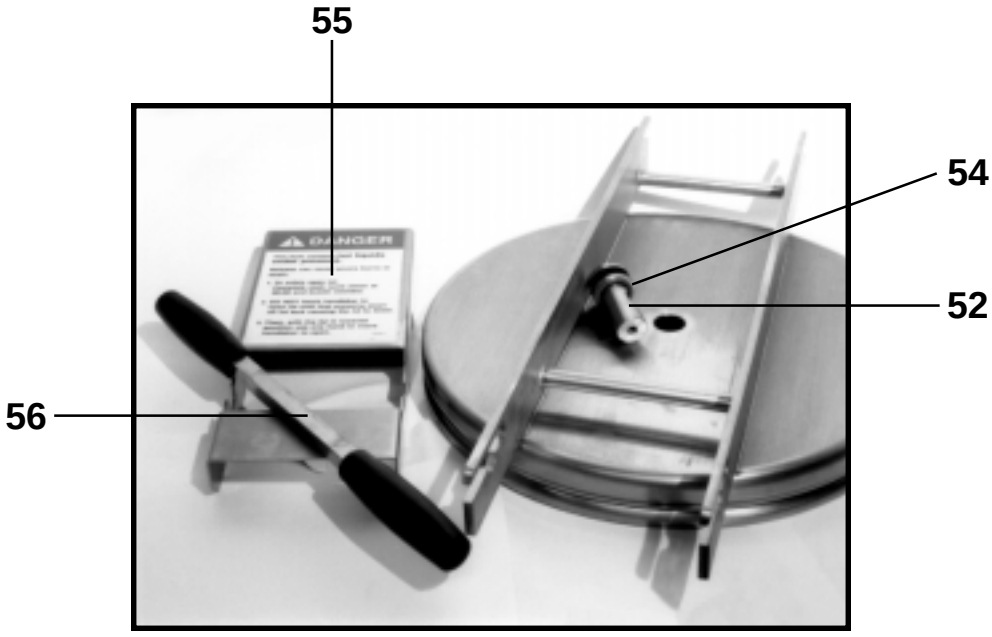

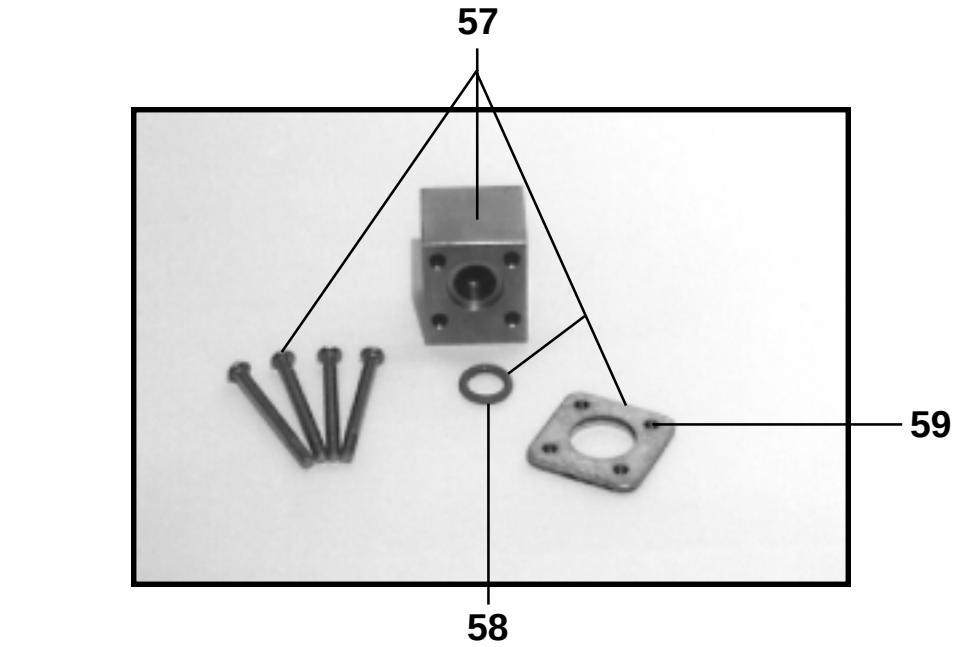

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
1	Danger Panel	PS1210
2	Latch Block *(Front) (Bottom Lock)*	PS1399
3	Hinge Block *(Rear)*	PS1400
5	Switch Guard	PS1086
6	Hi Limit Indicator Lamp	PS2298
7	Heat On Indicator Lamp	PS2298
8	Power On Indicator Lamp	PS2298
9	Circuit Board Asm	*Ref. Only*
10	Leg Front	PS1933
11	Collector	PS1206
12	Lid Bottom Lock	PS1046
13	Insulation Front Sections *(4 HD & 6 HD)*	PS1986
14	Insulation *(4 HD)* Insulation *(6 HD)*	PS1031 PS1792
15	High Limit Thermostat	PS1184
17	Electromechanical Relay	PS1007
21	Thermister Probe	PS2040

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(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
22	Speaker Asm	PS2360
25	On/Off Switch	PS1529
26	Heater *(240 Volt)*	PS1148
	Heater *(208 Volt)*	PS1147
27	Heater Holder	PS1430
28	Probe Guard	PS1744
29	Collector Gasket	PS1892/3
30	Heat Plate	PS1034
31	High Limit Thermostat Clamp	PS1312
32	Leg Rear With Wheel	PS1934
33	Wheel Assembly	PS1226/2
34	Leg Clamp Assembly	PS1621
35	Muffler	PS1152
36	Back Panel *(4 HD)*	PS1697
	Back Panel *(6 HD)*	PS1698
37	Vent Back Cap	PS1729
38	Vent Back Assembly	PS1156

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Winston Products Co.

(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
39	Vent Assembly *(4 HD)*	PS1653
	Vent Assembly *(6 HD)*	PS1686
40	Weight *(4 HD)*	PS1071
	Weight *(6 HD)*	PS1073
	Note: ***When identifying correct weight for ordering, read PSI engraved on weight lifter.***	
41	Weight Lifter *(4 HD)*	PS1039
	Weight Lifter *(6 HD)*	PS1073
42	Teflon Slide	PS1075/3
43	Vent Block Assembly *(4 HD)*	PS1026
	Vent Block Assembly *(6 HD)*	PS1684
44	Vent Tube *(4 HD)*	PS1322
	Vent Tube *(6 HD)*	PS1678
45	Vent Solenoid Spring	PS1320/3
46	Vent Solenoid	PS1088
47	Vent Solenoid Cotter Pin	PS1121/3
48	Drain Valve	PS1066
49	Drain Valve Handle	PS1695
50	Lid Valve Assembly	PS1127
51	Lid Valve Spring	PS1028/3

WINSTON COLLECTRAMATIC FRYER
Parts Identification

Photo Reference Number	Part Description	Order Number
52	Lid Valve Body	*Ref. Only*
53	Lid Valve Retainer	PS1057
54	Lid Valve O-Ring	PS1010/3
55	Lid Lock *(Bottom Lock)*	PS1449
56	Handle Bar *(Bottom Lock)*	PS1168
57	Vent Block Assembly *(4 HD)* Vent Block Assembly *(6 HD)*	PS1026 PS1684
58	Vent Tube O-Ring	PS1005/3
59	Vent Block Nut Plate	PS1704/6

NOTE: See pages 1 - 6 for Photo Reference

Lit. #4275T166 – 8/98

SERVICE MANUAL

WINSTON COLLECTRAMATIC

FRYER

8 CHANNEL MODELS

4 HEAD & 6 HEAD

MANUAL REORDER: LIT. 6710/REV.0/9-91

DANGER

The procedures contained in this manual involve accessing bare electrical terminals and exposure to voltages capable of producing serious injury or death. Any person attempting diagnoisis and/or repair involving removal of panels and/or exposure to live electrical components must be trained or experienced in such service procedures. Disconnect electrical service while performing the procedures listed in this manual.

WINSTON

PRODUCTS COMPANY

2345 CARTON DRIVE . LOUISVILLE, KENTUCKY . 40299 . (800) 234-5286 . FAX: (502)495-5458

INTRODUCTION

This Service Manual is to be used for the following **WINSTON COLLECIRAMATIC FRYERS:**

PRESSURE FRYERS MODEL NO.	OPEN FRYERS MODEL NO.
PFWPC4201 CASJ(or M)	OFWPC4201 CASJ(or M)
PFWPC6201 CASJ(or M)	OFWPC6201 CASJ(or M)
PF46P32 SJ(or M)	OF49P32SJ(or M)
PF56P32 SJ(or M)	OF59P32SJ(or M)
PF46P37 SJ(or M)	OF49P37SJ(or M)
PF56P37 SJ(or M)	OF59P37SJ(or M)
PFWPC4201 SJ(or M)	OFWPC4201 SJ(or M)
PFWPC6201 SJ(or M)	OFWPC6201 SJ(or M)
PFWPC4201 NZSN	OFWPC4201 NZSN
PFWPC6201 NZSN	OFWPC6201 NZSN
PFWPC4201 MASN	OFWPC4201 MASN
PFWPC6201 MASN	OFWPC6201 MASN
PF46P44 SN	OF49P44 SN
PF56P44 SN	OF59P44 SN
PFWPC4201 AUSN	OFWPC4201 AUSN
PFWPC6201 AUSN	OFWPC6201 AUSN
PF46P45SN	OF49P45 SN
PF56P45SN	OF59P45 SN

NOTE: The letter 'J' on the end of the Model Number denotes 208 volts and 'M' denotes 240 volts. To determine the intended market for the above listed model numbers, refer to wiring diagrams listed between pages 18 through 25.

Knowledge of the proper installation, operation, and maintenence procedures is an important step to insure safe operation of any equipment. The instructions in this manual are meant as guidelines for proper service of the **WINSTON COLLECTRAMATIC FRYER.** In accordance with generally accepted products safety labeling guidelines for potential hazards, the following two signal words are used throughout this service manual where applicable:

DANGER: Used to indicate the presence of a hazard which could cause substantial property damage, severe personal injury or death if warning is ignored.

CAUTION: Used to indicate the presence of a hazard which could cause minor property damage or personal injury if warning is ignored.

DANGER: THE PROCEDURES CONTAINED IN THIS MANUAL INVOLVE ACCESSING BARE ELECTRICAL TERMINALS AND EXPOSURE TO VOLTAGES CAPABLE OF PRODUCING SERIOUS INJURY OR DEATH. ANY PERSONS ATTEMPTING DIAGNOSIS AND/OR REPAIR INVOLVING REMOVAL OF PANELS AND/OR EXPOSURE TO LIVE ELECTRICAL COMPONENTS MUST BE TRAINED OR EXPERIENCED IN SUCH SERVICE PROCEDURES. DISCONNECT ELECTRICAL SERVICE WHILE PERFORMING THE PROCEDURES LISTED IN THIS MANUAL.

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OPEN FRYERS 22-25

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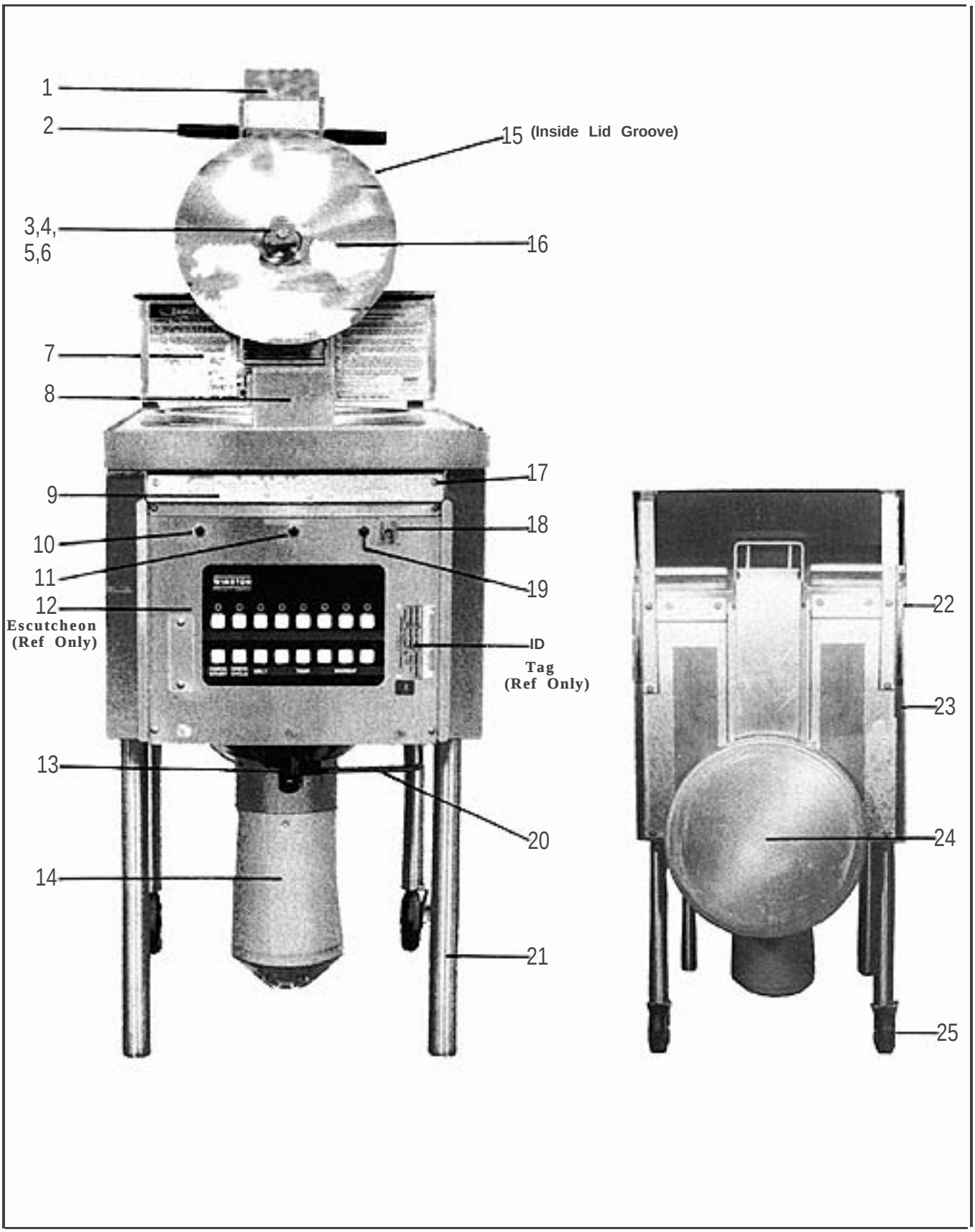
1
2
15 (Inside Lid Groove)
3,4,
5,6
16
7
8
17
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12
Escutcheon
(Ref Only)
ID
Tag
(Ref Only)
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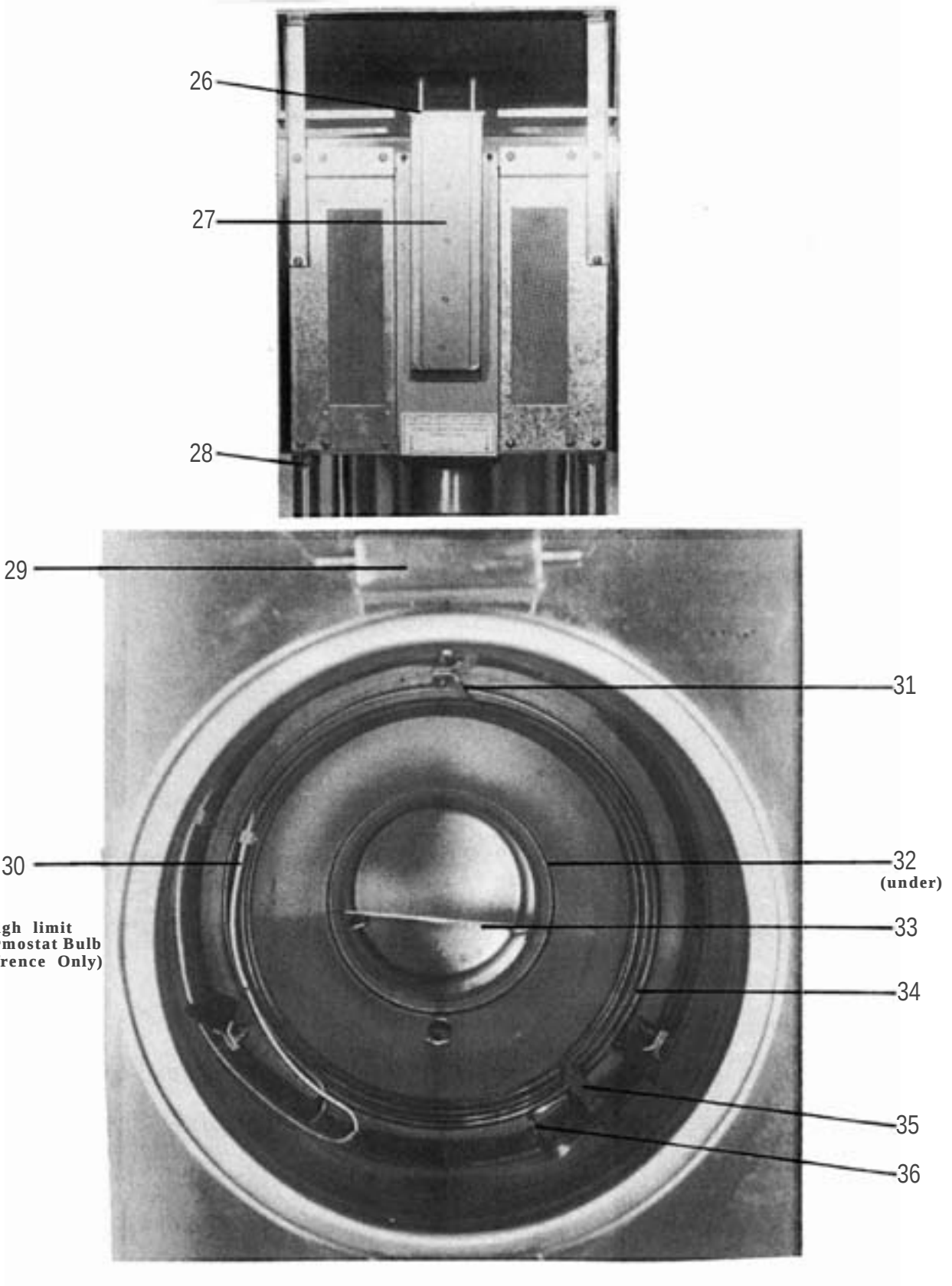
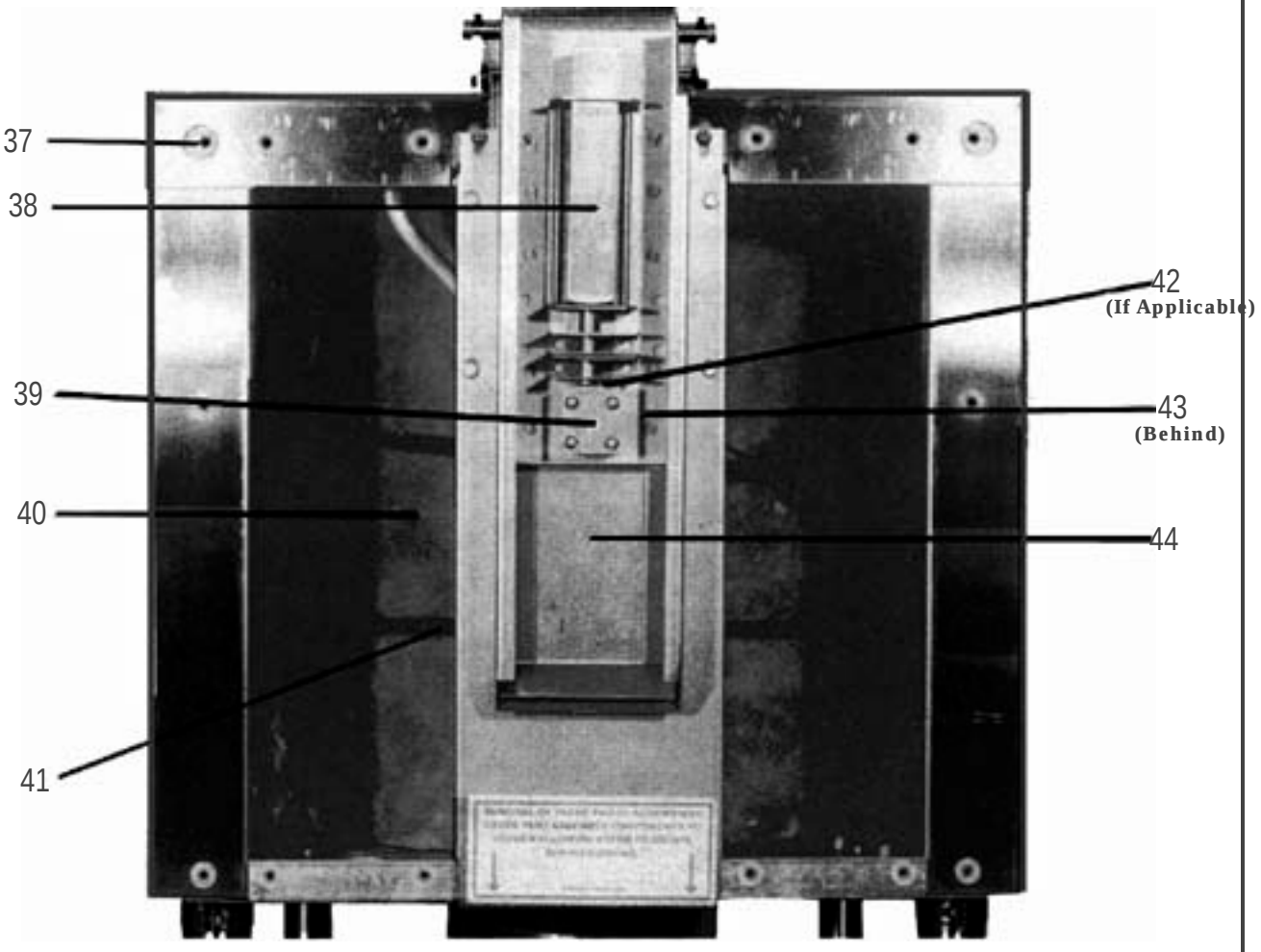
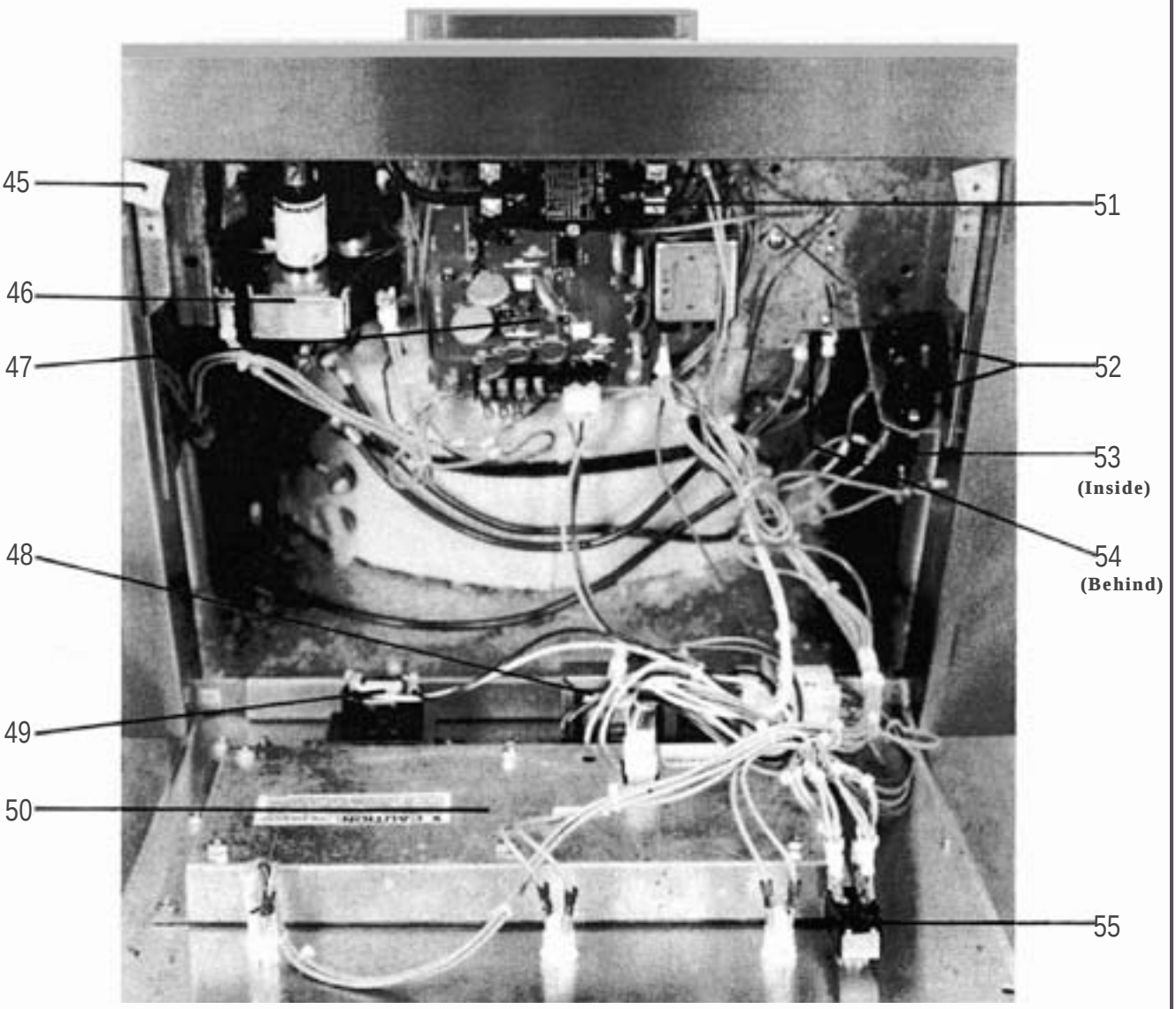

26
27
28
29
31
30
32
(under)
High limit
Thermostat Bulb
(Refrence Only)
33
34
35
36



NOTE: 6-Head Model Picture


45
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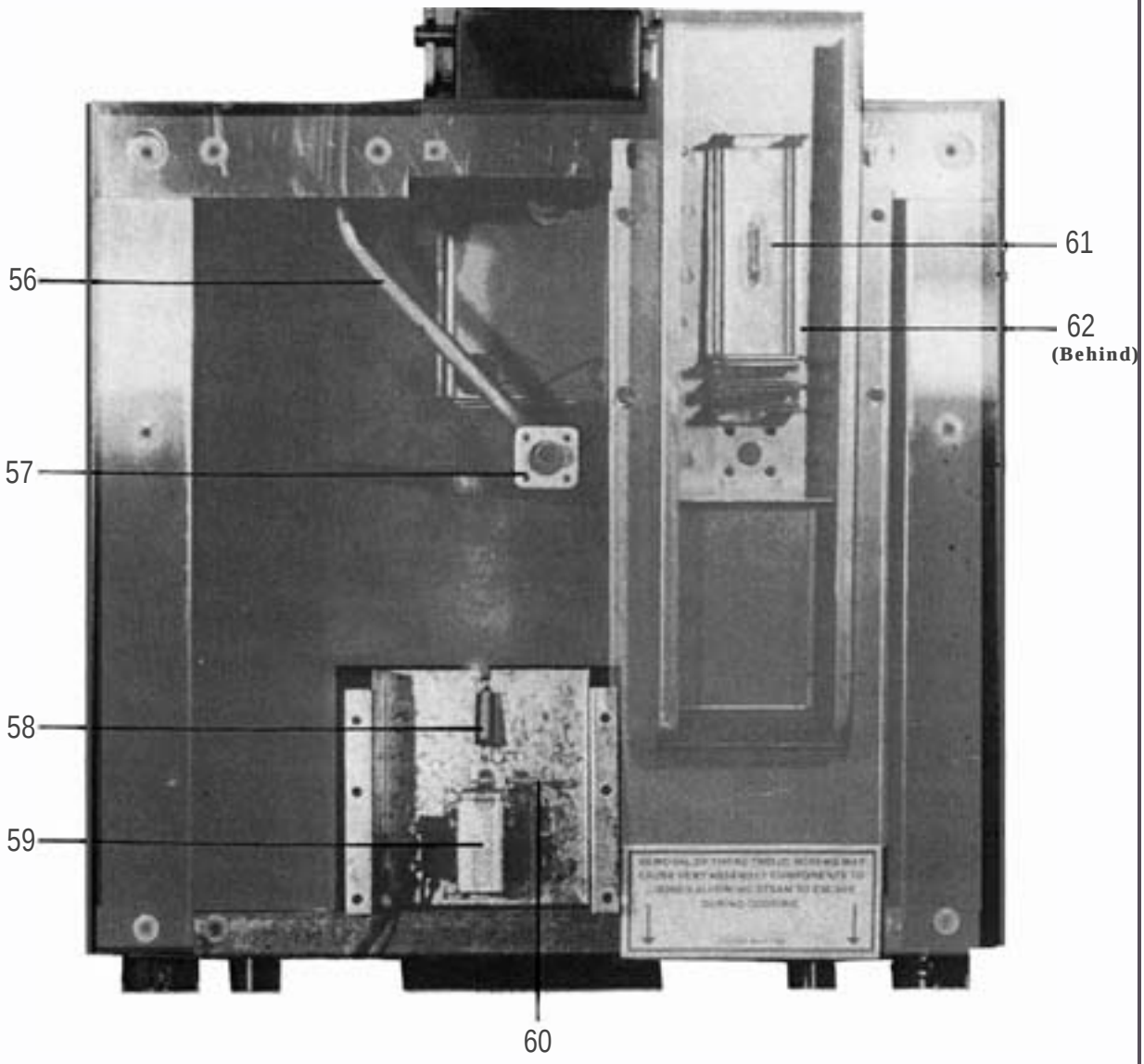
51
52
53
(Inside)
54
(Behind)
55



NOTE: 6-Head Model Pictured

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty	Description
1	Lid Lock	PS1449	1	Lid Lock
2	Handle Bar	PS1168	1	Handle
3	Lid Valve Assembly	PS1127	1	Valve Body
			1	Spring
			1	Retainer
			1	O-Ring
4	Lid Valve Spring	PS1028/3	3	Spring
5	Lid Valve Retainer	PS1057	1	Retainer
6	Lid Valve O-Ring	PS1010/3	3	O-Ring
7	Danger Panel	PS1210	1	Panel
8	Latch Block (Front)	PS1399	1	Block
			3	Washer
			3	Lockwasher
			3	Nut- Flex Lock
9	Eyebrow	PS1134	1	Eyebrow
10	'High Limit' Indicator Lamp	PS1012/3	3	Lamp
11	'Heat On' Indicator Lamp	PS1012/3	3	Lamp
12	Membrane Panel	PS1748	1	Panel
13	Drain Valve	PS1066	1	Valve
			1	Valve Plate
			2	Screw
			2	Nut
14	Collector		1	Collector
			1	Heat Plate
	13"	PS1206		
	11"	PS1925		
15	Lid Gasket	PS1891/3	3	Gasket
16	Lid	PS1046	1	Lid- Pressure Lock

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
17	Screw	PS1118/6	6	Screw
18	Switch Guard	PS1086	1	Guard
19	Power Indicator Lamp	PS1012/3	3	Lamp
20	Drain Valve Handle	PS1695	2	Screw
			1	Handle
			2	Nut
			1	Bracket
21	Leg	PS1142/2	2	Leg
22	Screw	PS1241/6	6	Screw
23	Back Panel		2	Panels
	4 - Head	PS1697		
	6 - Head	PS1698		
24	Muffler	PS1152	1	Muffler
25	Wheel Assembly	PS1226/2	2	Wheel - 4"
			2	Bolt
			2	Nut
26	Vent Back Cap	PS1729	1	Cap
			1	Nut
27	Vent Back Assembly	PS1156	1	Vent Back
			2	Spring
			2	Rod
			1	Cap
			1	Nut
28	Leg Clamp Assembly	PS1621	1	Clamp
			2	Screw
			2	Nut
29	Hinge Block (Rear)	PS1400	1	Hinge Block
			3	Washer
			3	Lockwasher
			3	Nut

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
30	'High Limit' T'Stat Clamp	PS1312	1	Clamp
			1	Screw
31	Heater Holder	PS1430/3	3	Heater Holder
32	Collector Gasket	PS1892/3	3	Gasket
33	Heat Plate		1	Heat Plate
	14.75"	PS1034		
	12.75"	PS1918		
34	Heater Assembly		1	Heater Coil
			6	Ferrule
			2	Nut
			2	Compression Nut
			2	Washer
	208 Volts	PS1147		
	240 Volts	PS1148		
35	Probe Guard	PS1744	1	Probe Guard
			1	Screw
36	Probe Assembly	PS1747	1	Probe
			1	Washer
37	Grommet	PS1263/6	6	Grommet
38	Weight		1	Weight
	4 - Head (14 PSI)	PS1071		
	4 - Head(11.9PSI)	PS1072		
	6 - Head(11.9PSI)	PS1073		
	NOTE: For identifying correct weight when ordering, read PSI engraved on weight lifter.			
39	Vent Block Assembly		1	Block
			1	O-Ring
			4	Screw
			1	Nut Plate
			1	Plug
	4 - Head	PS1026		
	6 - Head	PS1684		

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
40	Insulation		1	Insulation - Front
			1	Insulation - Back
			2	Strap
			2	Buckle
	4 - Head	PS1031		
	6 - Head	PS1792		
41	Insulation Strap	PS1219/2	2	Strap
			2	Buckle
42	Vent Ball		3	Vent Ball
	4 - Head (If applicable)	PS1003/3		
	6 - Head (If applicable)	PS1685/3		
43	Vent Tube O-Ring	PS1005/3	3	O-Ring
44	Vent Assembly		1	Weight Lifter
			1	Teflon Slide
			2	Solenoid Wires
			1	Vent Weld Asm
			1	Solenoid
			1	Spring
			1	Bracket
			8	Nut
			8	Screw
			1	Cotter Pin
	4 - Head	PS1458		
	6 - Head	PS1686		
45	Grommet	PS127l/6	6	Grommet
46	Mercury Relay	PS1448	1	Relay
47	Circuit Board - Power	PS1800	1	Circuit Board
48	Transformer	PS1687	1	Transformer
49	Buzzer	PS1586	1	Buzzer
50	Computer		1	Computer
	General Market	PS1745		
	KFC (All markets excluding Canada)	PS1927		
	KFC (Canada)	PS1848		

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
51	Electromechanical Relay	PS1007	1	Relay
52	Fuse Holder	PS1096/2	2	Fuse Holder
53	Fuse Kit	PS1095/6	6	Fuse
54	High Limit Thermostat	PS1184	1	Thermostat
	" " " Canadian	PS1731	1	Thermostat
55	On/Off Switch	PS1529	1	Switch
56	Vent Tube		1	Tube
	4 - Head	PS1322		
	6 - Head	PS1678		
57	Vent Block Nut Plate	PS1704/6	6	Nut Plate
58	Vent Solenoid Spring	PS1320/3	3	Spring
59	Vent Solenoid	PS1088	1	Solenoid
			1	O-Ring
			2	Terminal Ring
			1	Cotter Pin
60	Vent Solenoid Cotter Pin	PS1121/3	3	Cotter Pin
61	Weight Lifter		1	Weight Lifter
			1	Teflon Slide
	4 - Head			
	11.9 PSI	PS1040		
	14.0 PSI	PS1039		
	6 - Head - 11.9 PSI	PS1041		
62	Teflon Slide	PS1075/3	3	Teflon Slide

TROUBLESHOOTING

SYMPTOMS	FAULTS
Electric shock **while in contact with fryer.** DANGER: **Turn OFF circuit breaker or disconnect fryer from power source**	1
Low pressure	15,16,17,18,22
No Pressure	19,21,20,22,23,40,4
Pressure loss excessive through Vent in rear of fryer.	19,22,20,21,23
Pressure loss excessive through Lid Valve.	16,17,43
Not venting at end of cooking cycle	20,25,43,44,45,23
No heat	2,7,39,14,46,4,40
Heats slowly.	2,5,11,14,6
Heat On Lamp off when heating.	7,9
Heat On Lamp constantly ON during cook cycle.	3,46,4
High Limit Lamp on continuously.	10,46,4
Power Lamp out or dim..	2,9
Electromechanical relay buzzing loudly.	7,24,14
Solenoid buzzing loudly.	47,20,24,37
Shortening leaking from front of fryer.	27,28
Shortening leaking around Collector Gasket.	26,48
Shortening smoking	29,30
Shortening too hot.	3,42,4
Shortening has burnt or bad taste.	31,30,13,33
Shortening foaming excessively.	30
Shortening breaking down too quickly.	36,31,12,13,8
Shortening boils over.	32,33,34,35,38
“Probe”displayed in window.	49,42,39,4
No Display in window.	7,41,4
Fryer stops heating between170-230 on display	50,51
Display shows ‘H_2O’	50,51

TROUBLESHOOTING

	FAULTS	REMEDIES: CLEAN	ADJUST	REPAIR	REPLACE
1	Improper ground, wiring short **DANGER**: Turn OFF circuit breaker.			*	*
2.	Open power line				
	Circuit breaker tripped.		*		
	Fuse blown				*
	Cordset not plugged in		*		
	Faulty power switch.				*
3.	Programming error in computer.		*		
4.	Computer defective.				
5.	One of three circuits open in fryer.				*
6.	Heater wires connected wrong (3 ph. vs single ph).		*		
7.	Loose wire connections.			*	
8.	208 volt fryer installed on 240 volt supply.		*		
9.	Indicator Lamp burned out.				*
10.	High Limit Thermostat defective.				*
11.	Heater(s) burned out.				*
12.	Heaters misaligned.		*		
13.	Heater(s) out of holders and touching.		*		
14.	Electromechanical Relay Defective.				*
15.	Lid Gasket defective.				*
16.	Lid Valve O-Ring not seating, defective.				*
17.	Lid Valve Retainer loose.		*		
18.	Weight dirty.	*			
19.	Lost Vent Ball under weight in vent assembly (if applicable - newer systems do not utilize ball).				*
20.	Power Board defective.				*
21.	Solenoid defective.		*		*
22.	Vent Tube O-Ring defective..				*
23.	Weight Lifter dirty or defective.	*			*
24.	Relay mounting is loose.		*		
25.	Vent Spring defective or missing.				*
26.	Collector Gasket dirty or defective.	*			*
27.	Thermostat, Heater or Probe nuts on cooking vessel wall loose.		*		
28.	Thermostat, Heater or Probe ferrules damaged.				*
29.	Shortening level below top heater		*		
30.	Shortening badly broken down.	*			*
31.	Crackling build-up on heater coils.	*			
32.	Cracklings left in Collector from night before or overfilled. . .	*			
33.	Contents of Collector stirred after warm-up.				
34.	Heat Plate left out of Collector.		*		*
35.	Solid shortening in Collector - improper warm-up.	*			
36.	Fryer not cleaned properly.	*			

TROUBLESHOOTING

FAULTS	CLEAN	ADJUST	REPAIR	REPLACE
37. Cotter pin too long or tight (must rotate freely).		*		*
38. Excessive moisture in shortening	*			
39. Pin loose in molex connector on computer			*	
40. Power board plug loose or off		*		
41. Transformer defective				*
42. Probe defective.				*
43. Shortening/crackling build up in vent tube.	*			
44. Vent Ball stuck on Vent Block (if applicable).	*			
45. Vent solenoid cotter pin missing.				*
46. Mercury relay defective.				*
47. Vent solenoid dirty.	*			
48. Collector Out of round - defective.				*
49. Probe wire(s) disconnected from plug.			*	
50. Fryer filled with water (See Note 1).				
51. Solid shortening being melted in fryer (See Note 2).				

NOTE 1: This fryer is equiped with an AquaLert™ software system. Software is designed to stop the heat-up process prior to boiling point when water is detected in fryer. If fryer is filled with water, empty, clean, dry thoroughly and fill with cooking oil.

NOTE 2: When solid shortening is being heated in fryer, the water detection software system may respond as though water is being heated due to the slower heat curve experienced. When heating solid shortening, remove any pieces which may be lodged next to temperature sensing probe.

AMPERAGE/OHM VALUE CHARTS

NOTE: **Resistance measurements are taken across coil of relays and terminal ends on heaters. Wires must be removed from component prior to resistance check.**

OHM CHART

DESCRIPTION	OHMIC VALUE	PART NO
Mercury Relay		
Watlow	690.0 OHMS +/- 10%	PS1448
Duracool	500.0 OHMS +/- 10%	PS1448
Electromechanical Relay	225.0 OHMS +/- 10%	PS1007
Heater - 208V, 3500W	12.3 OHMS +/- 10%	PS1147
Heater - 240V, 3500W	16.4 OHMS +/- 10%	PS1148

AMPERAGE CHART

USA & CANADA

PHASE	VOLTAGE	LINE CURRENT (AMPS)	HEATER CURRENT (AMPS)
1	208	-	-
	240	43.7	14.6
3	208	29.2	16.8
	240	25.2	14.6

ENGLAND/ MALAYSIA/SINGAPORE

PHASE	VOLTAGE	LINE CURRENT (AMPS)	HEATER CURRENT (AMPS)
1	220	40.1	13.4
	240	43.7	14.6
3	-	-	-
	-	-	-

ENGLAND/ MALAYSIA/SINGAPORE

PHASE	VOLTAGE	LINE CURRENT (AMPS)	HEATER CURRENT (AMPS)
1	-	-	-
	-	-	-
3	380	13.4	13.4
	416	14.6	14.6

AUSTRALIA

PHASE	VOLTAGE	LINE CURRENT (AMPS)	HEATER CURRENT (AMPS)
1	-	-	-
3	416	14.6	14.6

NEW ZEALAND

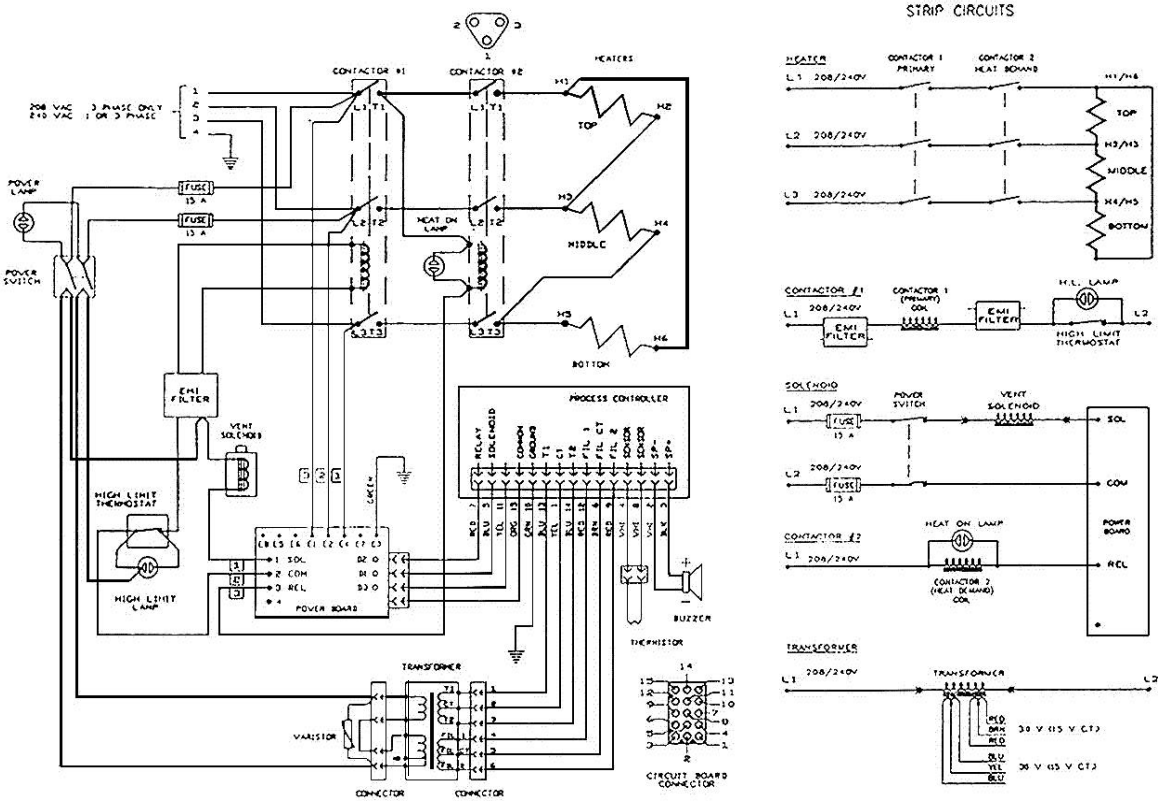
PHASE	VOLTAGE	LINE CURRENT (AMPS)	HEATER CURRENT (AMPS)
1	-	-	-
3	400	13.9	13.9

SOUTH AFRICA

PHASE	VOLTAGE	LINE CURRENT (AMPS)	HEATER CURRENT (AMPS)
1	-	-	-
3	380	13.4	13.4

CAUTION: **208 Volt Fryers are not to be used in single phase applications. Current produced exceeds acceptable standards.**

WIRING DIAGRAM

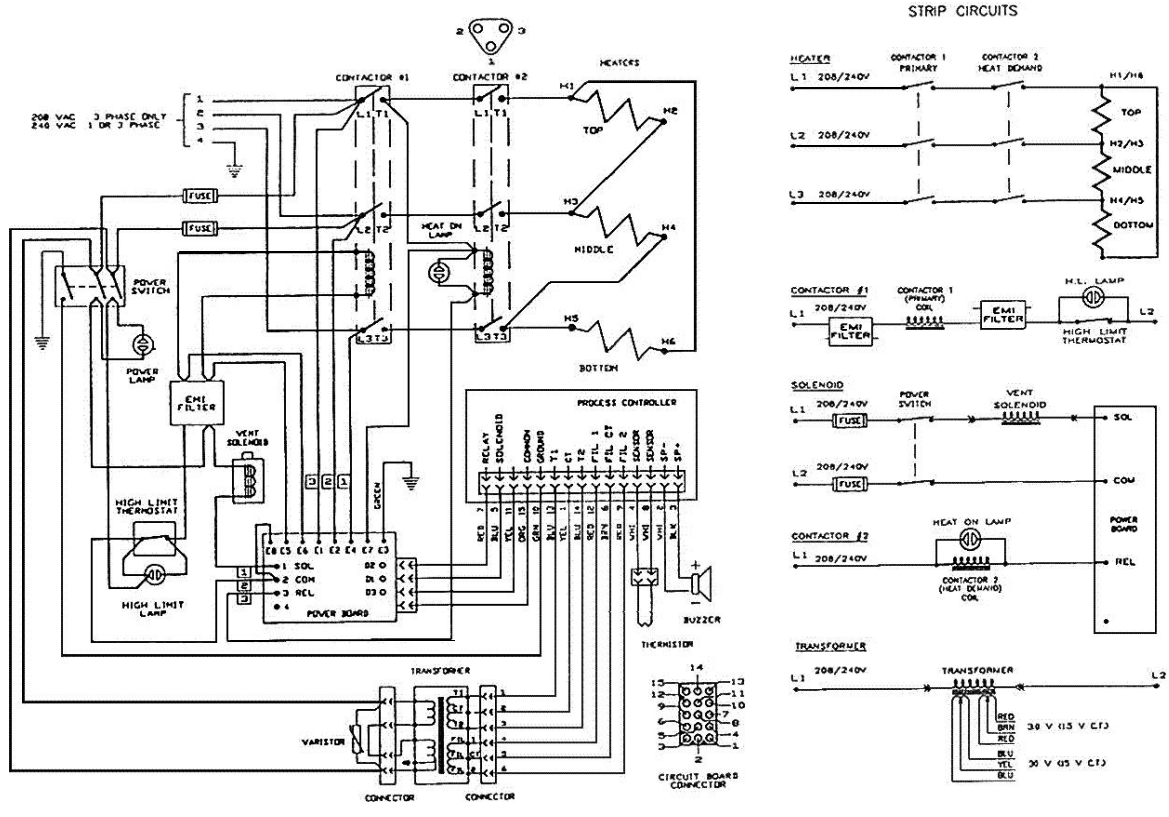


FOR MODELS NUMBERS:

PF46P32SJ (or M)
PF56P32SJ (or M)
PF46P37SJ (or M)
PF56P37SJ (or M)

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM

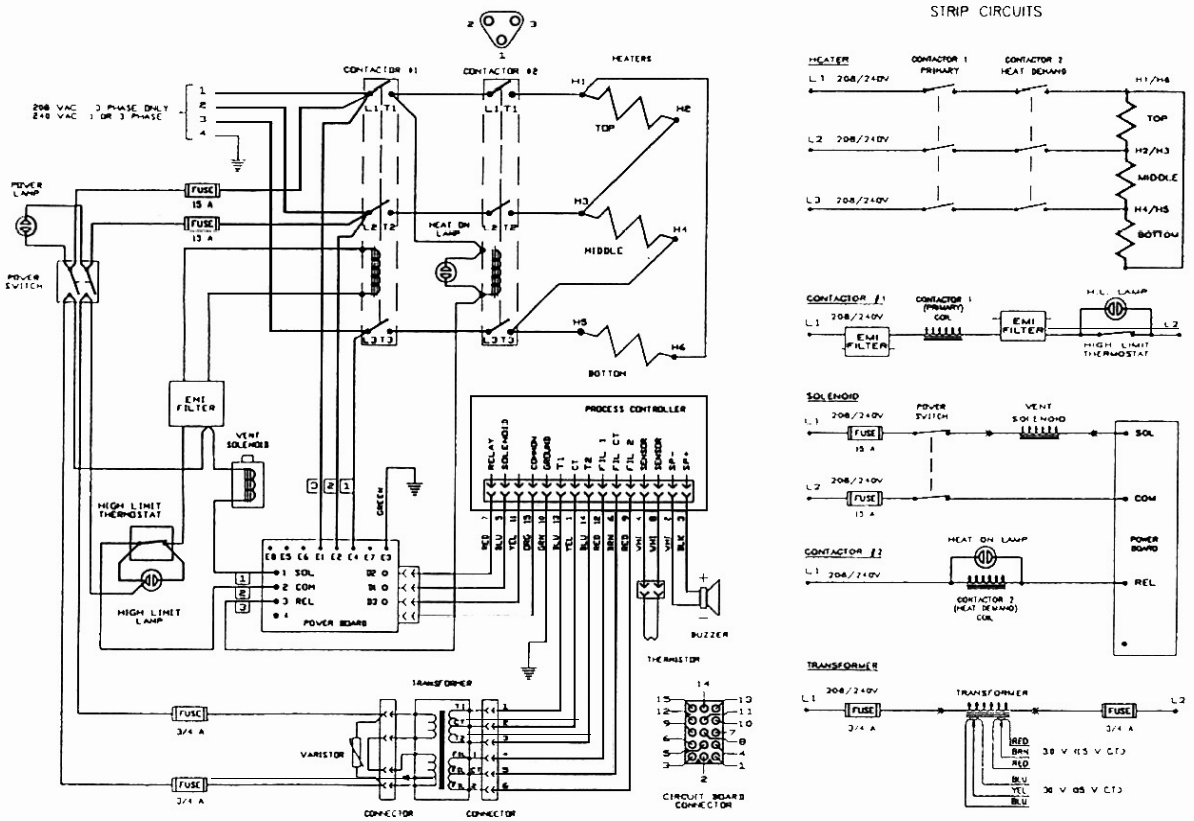


FOR MODELS NUMBERS:

PFWPC4201SJ (or M)
PFWPC6201SJ (or M)

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM

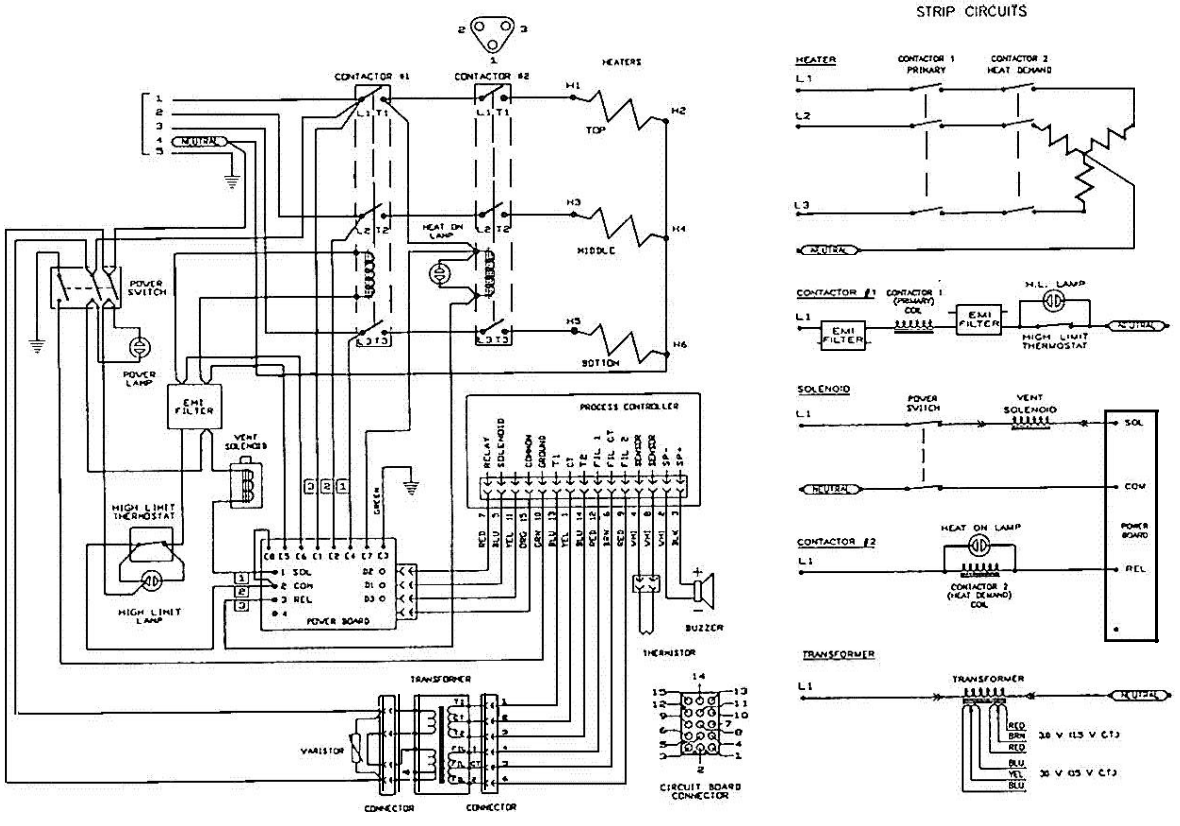


FOR MODELS NUMBERS:

PFWPC4201CASJ (or M)
PFWPC6201CASJ (or M)

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM



FOR MODELS NUMBERS:

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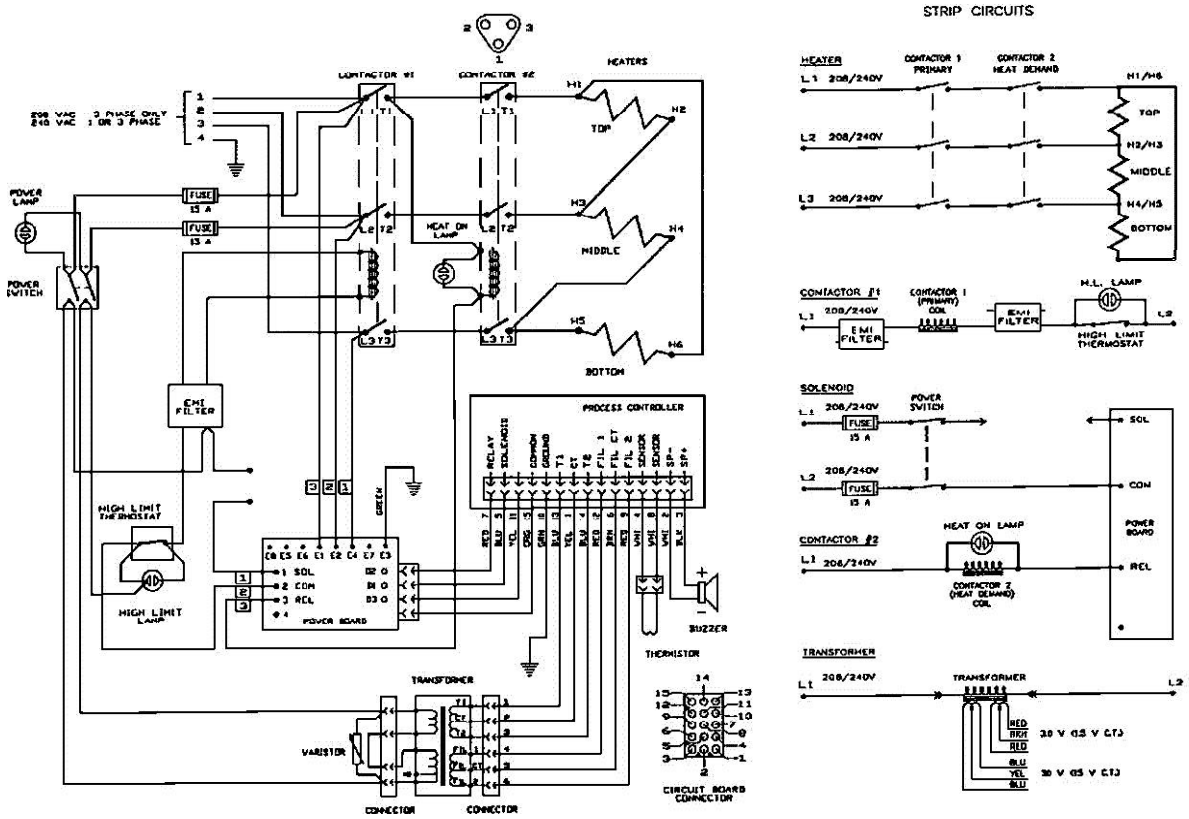
PFWPC6201NZSN
PFWPC4201MASN
PFWPC6201MASN
PF46P44SN
PF56P44SN

PFWPC4201AUSN
PFWPC6201AUSN
PF46P45SN
PF56P45SN

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM

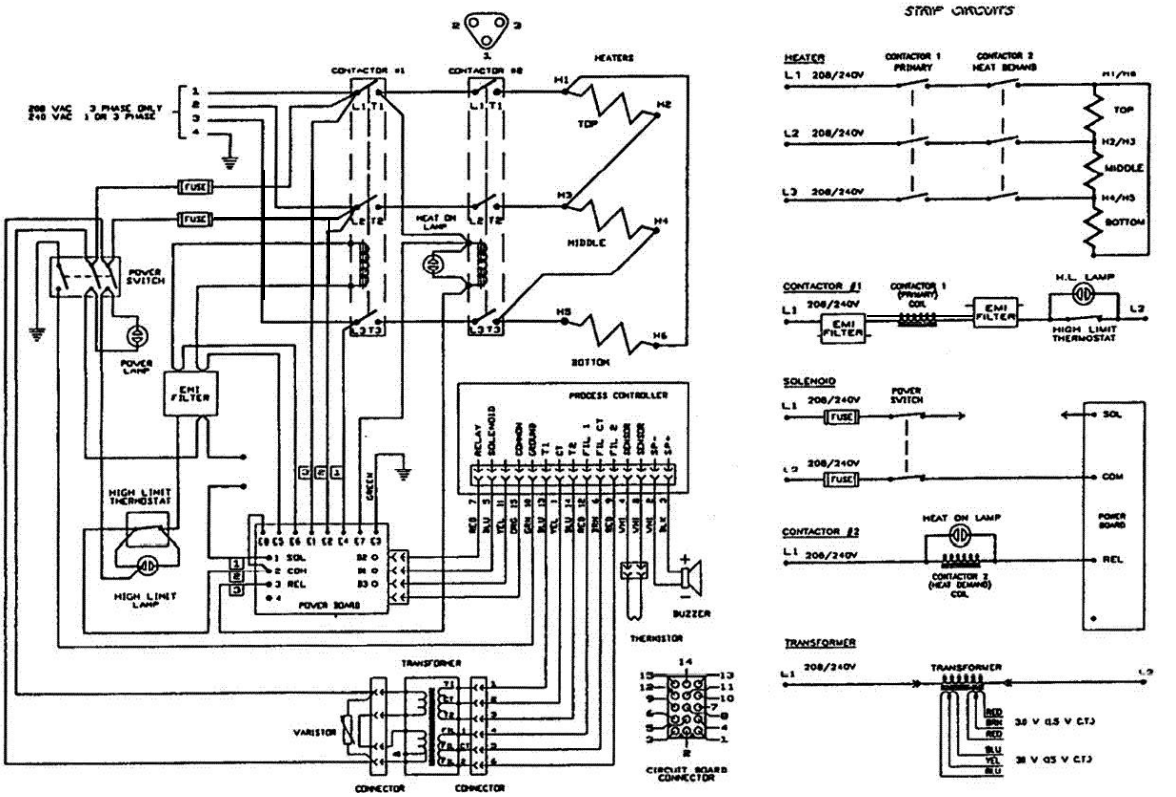


FOR MODELS NUMBERS:

OF49P32SJ (orM)
OF59P32SJ (orM)
OF49P37SJ (orM)
OF59P37SJ (orM)

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM

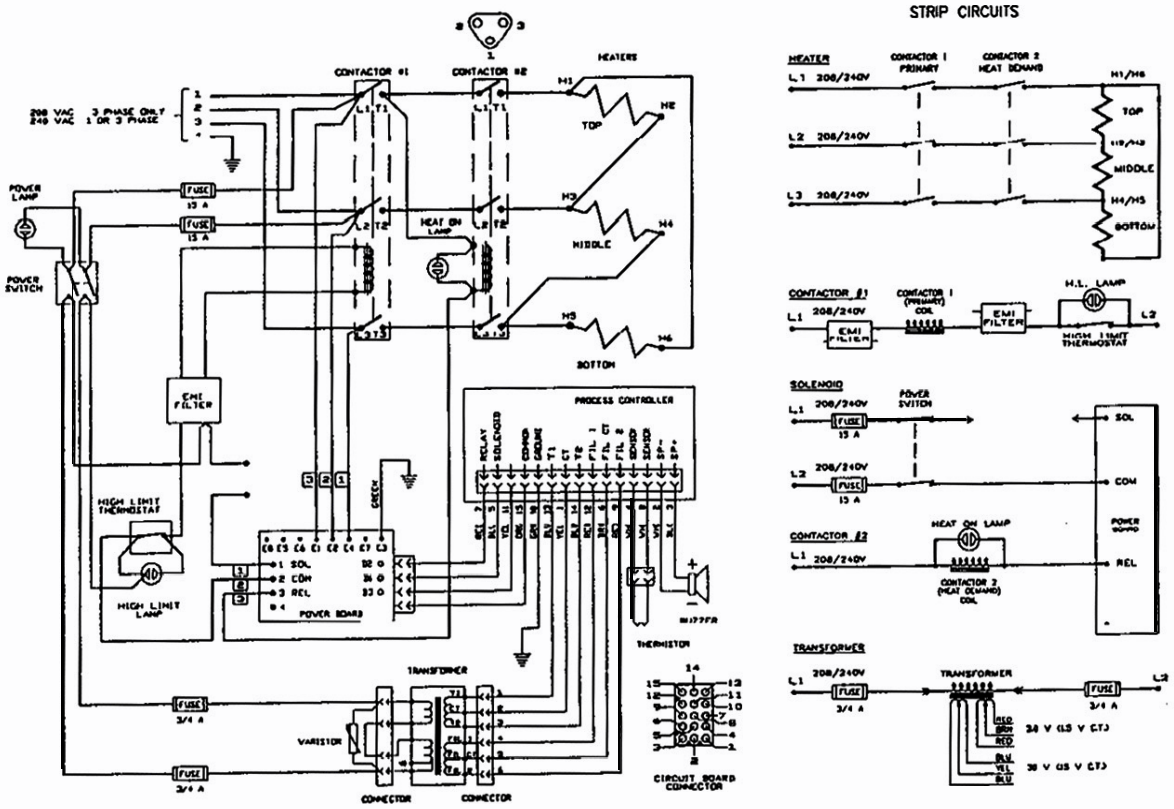


FOR MODELS NUMBERS:

OFWPC4201SJ (or M)
OFWPC6201SJ (or M)

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM

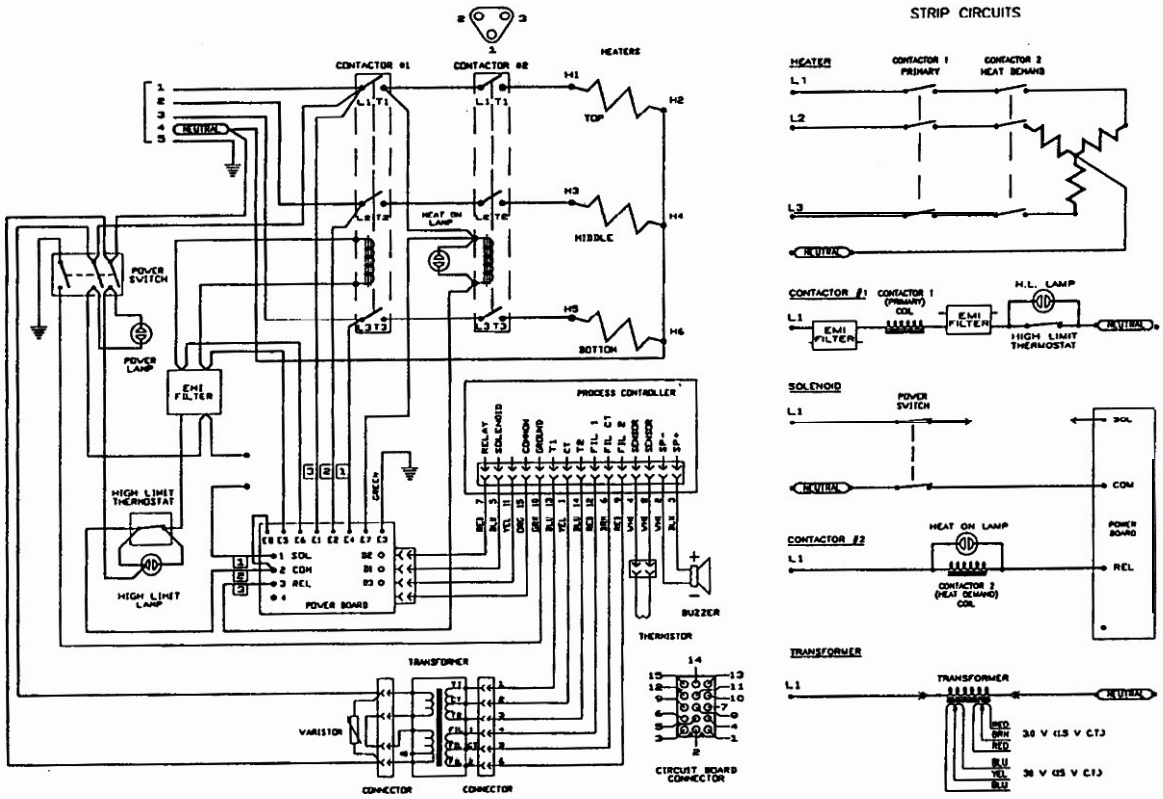


FOR MODELS NUMBERS:

OFWPC4201CASJ (or M)
OFWPC6201CASJ (or M)

Model numbers listed are as reflected on Identification Tag.

WIRING DIAGRAM



FOR MODELS NUMBERS:

OFWPC4201NZSN
OFWPC6201NZSN
OFWPC4201MASN
OFWPC6201MASN
OF49P44SN
OF59P44SN

OFWPC4201AUSN
OFWPC6201AUSN
OF49P45SN
OF59P45SN

Model numbers listed are as reflected on Identification Tag.

REPLACE ELECTROMECHANICAL RELAY (ITEM N0.51)

Tools: Phillips Screwdriver #2; Slotted Screwdriver.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in Step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.
4. Remove relay wires. **NOTE:** Mark each wire location to ensure proper connection to new relay.
5. Remove the four (4) screws securing relay to panel and save for reuse.
6. Replace the four (4) screws securing new relay to panel.
7. Observing wire location markings, connect wires to proper relay terminals.
8. Replace the four (4) screws securing escutcheon to relay panel.
9. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE MERCURY RELAY (ITEM NO. 46)

Tools: Phillips Screwdriver #2; Slotted Screwdriver.

Procedure:

1. **DANGER**: Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing Screws in Step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.
4. Remove relay wires. **NOTE:** Mark each wire location to ensure proper connection to new relay.
5. Remove the four (4) screws securing relay to panel and save for reuse.

6. Replace the four (4) screws securing new relay to panel.
7. Observing wire location markings, connect wires to proper relay terminals.
8. Replace the four (4) screws securing escutcheon to relay panel.
9. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE TRANSFORMER (ITEM NO. 48)

Tools: Phillips Screwdriver #2; Nut Driver -3/8"; Wire Cutters.

Procedures:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.
4. Remove wire tie securing transformer wires to main harness.
5. Disconnect the two (2) transformer plugs from harness plugs.
6. Remove the two (2) nuts securing transformer to escutcheon and save for reuse.
7. Replace the two (2) nuts securing new transformer to escutcheon.
8. Insert the two (2) transformer plugs into harness plugs.
9. Replace the four (4) screws securing escutcheon to relay panel.
10. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE FUSE HOLDER (ITEM NO. 52)

Tools: Phillips Screwdriver #2; Slotted Screwdriver; Wrench-5/16"

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in Step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Remove the two (2) wires attached to fuse holder marking wire locations to ensure proper connection to new fuse holder.

5. Remove the two (2) screws securing fuse holder to relay panel. Save screws and nuts for reuse.

6. Replace the two (2) screws and nuts securing new fuse holder to relay panel.

7. Observing wire location markings, connect fuse wire to proper fuse terminals.

8. Replace the four (4) screws securing escutcheon to relay panel.

9. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE POWER BOARD (ITEM N0. 47)

Tools: Phillips Screwdriver #2; Slotted Screwdriver; Nut Driver - 5/16".

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws instep 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Unplug the 3-pin connector from power board.

   NOTE: Mark wire locations to ensure proper connection to new power board and contactor prior to Steps 5 and 6.

5. Remove the three (3) wires attached to bottom of power board.

6. Follow the four (4) wires from right hand side of power board and remove from termination point. Wires labeled El, E2 and E3 connect to contactor #I and E4 to relay panel.

7. Remove the four (4) nuts securing power board to relay panel.

8. Replace the four (4) nuts securing new power board to relay panel.

9. Observing wire location markings, replace the three (3) wires removed in Step 5 to power board.

10. Attach wires marked El, E2 and E3 on power board to Ll. L2 and L3 terminals on contactor #l.

    NOTE: Ll, L2 and L3 terminals on contactor #l are top, middle and bottom terminals respectively.

11. Attach 3-pin plug to power board.

12. Replace the four (4) screws securing escutcheon to relay panel.

13 Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE HEATER (ITEM N0.34)

Tools: Phillips Screwdriver #2; Nut Driver - 3/8" Nut Driver - 7/16". Wrench - 9/16"; Needle Nose Pliers; Wire Cutters; Rubber Mallet; Silicone Sealant.

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply, drain shortening and allow to cool. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Utilizing caution, hold heater end behind wire terminal and remove hex nut marking wire location prior to removal to ensure proper connection to new heater (See Figure 1).

5. Rotate insulation strap gaining access to buckle. Remove insulation strap and save for reuse.

6. Remove the two (2) pieces of insulation gaining access to heater compression nuts and save for reuse.

7. Remove heater compression nuts and save for reuse.

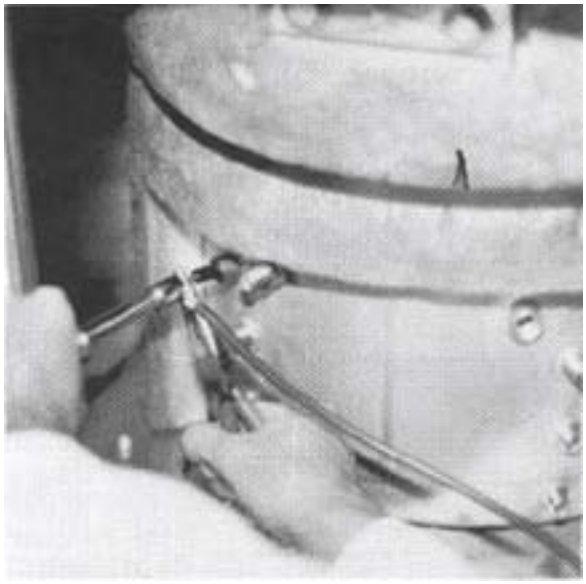


FIG.1

8. Remove lid gaining access to inside of cooking vessel.

   NOTE: If middle or bottom heater has to be replaced, the heater(s) above the one in question must also be removed to permit access.

9. Remove screw securing high limit thermostat bulb and clamp to top heater coil and save for reuse.

10. Remove screw securing probe guard to second heater coil and save for reuse.

11. Remove the two (2) nuts securing each of the three (3) heater holders to fryer. Save nuts and heater holders for reuse.

12. Using rubber mallet, tap heater ends forward on inside of cooking vessel allowing ferrule to be unseated from bushing on outside of vessel (See Figure 2).

CAUTION: Utilize care when removing heater in Step 13 not to damage thermostat bulb or temperature Probe.

13. Using wire cutters, remove ferrules from both heater ends and remove heater. Note position of offset in heater between terminal ends to ensure proper installation of new heater.

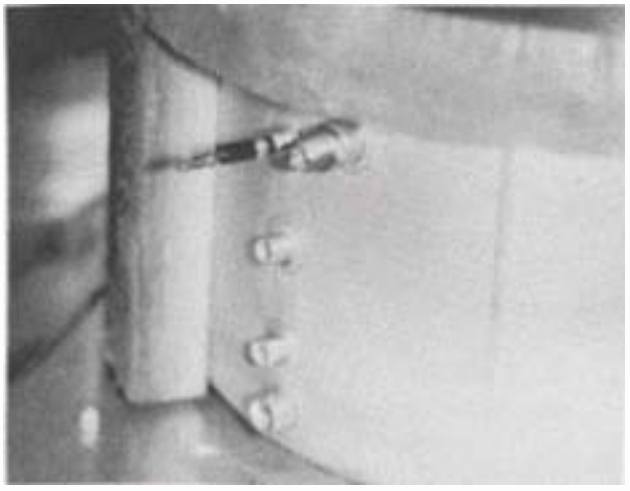


FIG. 2

14. Positioning offsets in proper location, place new heater in cooking vessel inserting ends through existing heater holes.

15. Replace the two (2) nuts securing each of the three (3) heater holders to cooking vessel.

16. Align coils to proper slots in heater holders and using a rubber mallet, gently tap heaters securing them into position.

17. Install new ferrules onto heater ends. Apply small amount of silicone sealant around ferrules and tighten compression nuts.

18. Replace insulation and strap.

19. Place new washer and correct heater wire(s) on heater terminal and utilizing caution, hold heater end behind wire terminal and tighten hex nut (See Figure 3).

20. Replace screw securing probe guard in position. **NOTE:** Correct position of guard is l/4" to right of probe tip.

21. Replace screw securing high limit thermostat bulb and clamp to top heater coil.

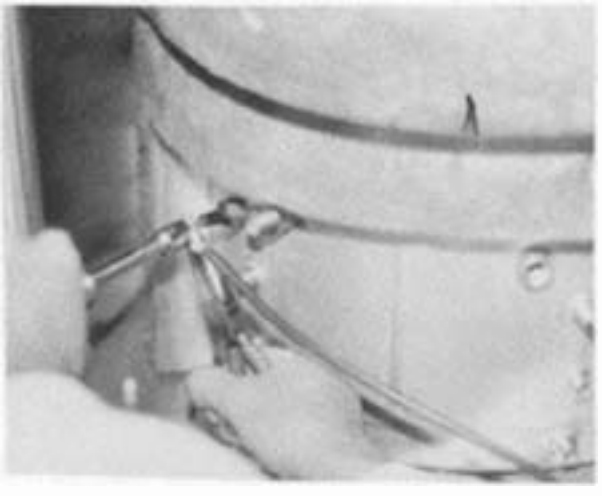


FIG.3

22. Replace the four (4) screws securing escutcheon to relay panel.

23. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE Hi LIMIT THERMOSTAT (ITEM N0. 54)

Tools: Phillips Screwdriver #2; Slotted Screwdriver; Open End Wrench - 9/16".

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply, dram shortening and allow to cool. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in Step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Remove screw securing locking arm to thermostat shaft. Save screw and arm for reuse.

5. Disconnect probe assembly from extension wire (See Figure 6 on following page).

CAUTION: Utilize care in preventing relay panel from falling forward when removing screws in Step 5.

6. Remove the four (4) screws securing relay panel to side panels and save for reuse. Lower panel slowly until secure (See Figure 4).

7. Rotate insulation strap gaining access to buckle. Remove insulation strap and save for reuse.

8. Remove section of insulation gaining access to thermostat bulb and compression nut.

9. Remove lid gaining access to inside of cooking vessel.

10. Remove screw securing thermostat bulb and clamp to top heater coil and save for reuse. Note position of bulb and clamp to ensure proper installation of new thermostat (See Figure 5).

11. Remove compression nut securing thermostat bulb to bushing.

12. Remove bushing and bulb from inside of cooking vessel.

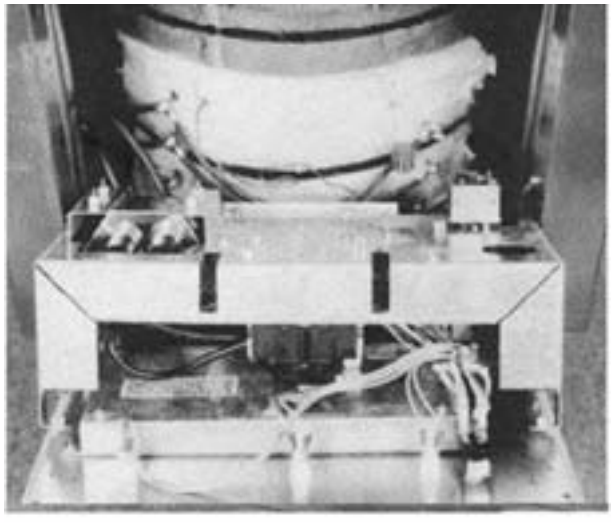


FIG. 4

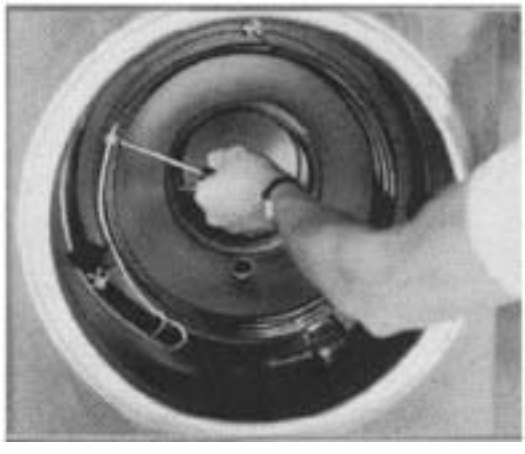


FIG. 5

13. Remove the two (2) screws securing thermostat to relay panel and save for reuse.

14. Replace the two (2) screws securing new thermostat to relay panel.

NOTE: Verify aluminum washer is in place. Washer should be placed flush against bushing prior to Step 14.

15. Route thermostat bulb through cooking vessel and heater holder. Replace screw securing bulb and clamp to top heater coil.

16. Apply a small amount of silicone sealant to bushing and secure to cooking vessel.

17. From inside of cooking vessel, holding thermostat bulb secure at point of entrance, tighten compression nut.

18. Replace insulation and strap.

19. Replace the four (4) screws securing relay panel to side panels.

20. Slide locking arm over thermostat shaft and replace screw securing arm to relay panel.

21. Replace the four (4) screws securing escutcheon to relay panel.

22. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE PROBE (ITEM NO. 36)

Tools: Phillips Screwdriver #2; Wrench - 9/16"; Wrench - 11/16"; Rubber Mallet; Silicone Sealant.

Procedures:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply, drain shortening and allow to cool. If unit is hardwired **CIRCUIT BREAKER MUST BE OFF.**

2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in Step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Disconnect probe assembly from extension wires (See Figure 6).

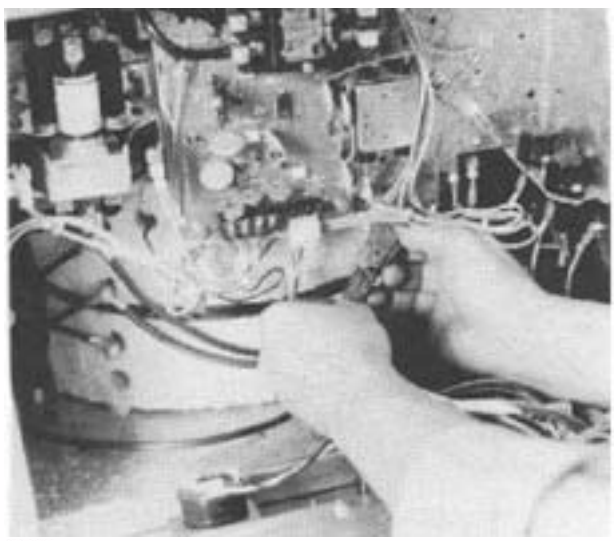


FIG. 6

CAUTION: Utilize care to prevent relay panel from falling unsupported when removing screws in Step 5.

5. Remove the four (4) screws securing relay panel to side panels and save for reuse. Lower panel slowly until secure (See Figure 7).

6. Pull down top edge of insulation and remove compression nut securing probe assembly to cooking vessel (See Figure 8).

7. Remove lid gaining access to inside of cooking vessel.

8. Using rubber mallet, gently tap probe allowing ferrule to unseat from bushing on outside of cooking vessel.

9. Remove bushing securing probe assembly to cooking vessel.

NOTE: Verify aluminum washer is seated flush against probe bushing prior to Step 10.

10. Insert new probe into hole and secure bushing to cooking vessel using 11/16" open end wrench.

11. Apply silicone sealant to ferrule.

12. **CAUTION:** Position of probe tip is critical. Align probe tip to where bend in probe occurs at 3/8" from fryer wall. Tighten compression nut using 9/16" open end wrench securing probe in place. (See Figure 9).

13. Replace the four (4) screws securing relay panel to side panels.

14. Connect probe wires to extension wires.

15. Replace the four (4) screws securing escutcheon to relay panel.

16. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

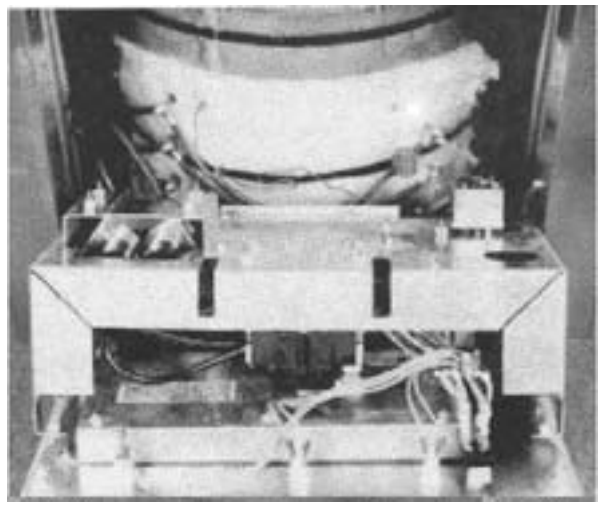


FIG. 7

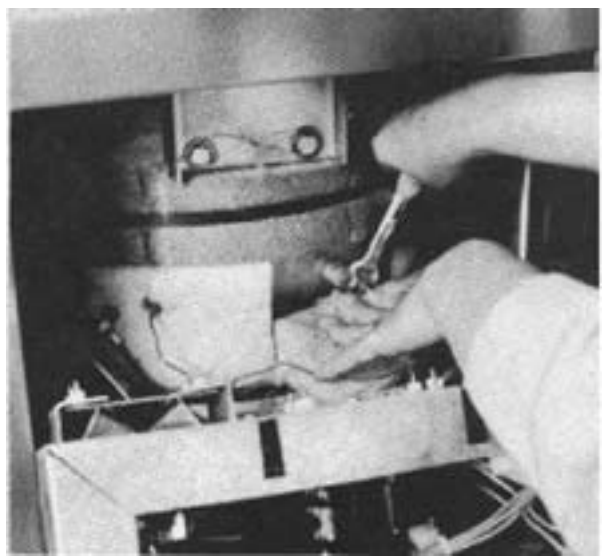


FIG. 8

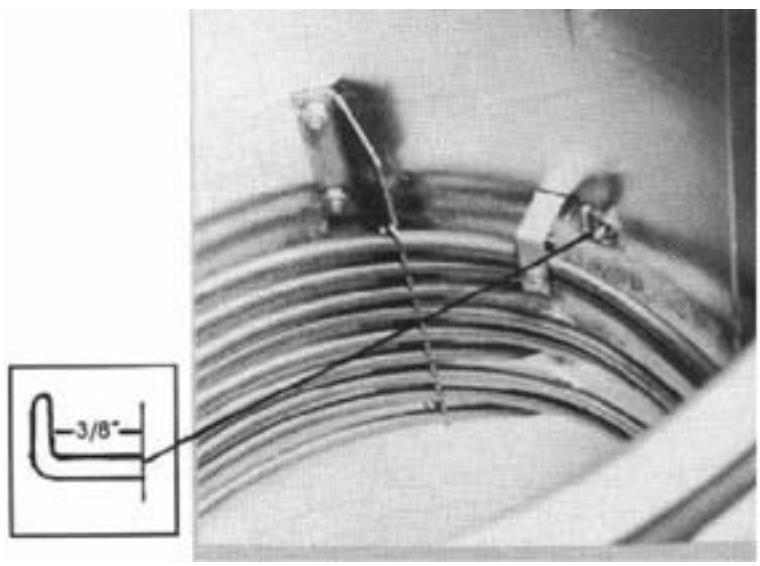


FIG. 9

REPLACE ON/OFF SWITCH (ITEM NO.55)

Tools: Nut Driver-5/8"; Phillips Screwdriver #2.

Procedure:

1. **DANGER :** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.
3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse.

CAUTION: Utilize care to prevent escutcheon from falling forward when removing these screws. Lower escutcheon slowly until secure in open position.

4. Remove hex nut securing power switch to escutcheon. Remove switch guard from switch. Save switch guard for reuse.
5. Remove old power switch from escutcheon. **DO NOT REMOVE WIRES FROM SWITCH AT THIS TIME.**
6. Position new power switch in escutcheon and adjust knurled nut to allow proper extension of switch stem beyond escutcheon.
7. Position switch guard on switch stem, replace and tighten hex nut being certain to keep switch guard straight.
8. Hold old power switch beside new, and working left to right, transfer wires to new power switch
9. Replace the four (4) screws securing escutcheon to relay panel.
10. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE LID VALVE O-RING (ITEM NO. 6)

Tools: Slotted Screwdriver - l/8".

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired,
   CIRCUIT BREAKER MUST BE OFF.

2. Move or rotate handle bar to open position. Lift lid above front block and remove from fryer. Depress lid lock removing handle bar from lid and save for reuse.

3. Remove lid lock from lid assembly and save for reuse.

4. Lift lid and hold valve body with other hand. Grasp the lid valve retainer with the other hand and twist counter-clockwise to loosen.

5. Remove lid valve retainer. Note that lid valve spring has closed coil on one end and open coil on the other. Open end goes toward lid. Save retainer and spring for reuse.

6. Remove lid valve and lower lid.

7. Using slotted screwdriver, carefully remove defective O-ring from groove in valve body.

8. Install new O-ring carefully pressing into groove in valve body.

9. Raise lid and insert lid valve into hole in lid. Make sure groove for lid lock is toward front. Lean lid toward back of fryer.

10. Holding valve body secure with one hand, install spring, (open coil toward lid). Using other hand turning clockwise, carefully screw retainer into valve body. Utilizing only hand pressure, completely tighten retainer to lid valve.

11. Lower lid and insert lid lock into groove in lid valve.

12. Depress lid lock, replace handle bar and place unit back into service.

REPLACE LID LOCK ASSEMBLY (ITEM NO. 1)

Tools: N/A

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrial power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Move or rotate handle bar to open position. Lift lid above front block and remove from fryer. Depress lid lock and remove handle bar from lid. Save handle bar for reuse.

3. Remove lid lock from lid assembly.

4. Install new lid lock on lid.

5. Depress lid lock, replace handle bar and place unit back into service.

REPLACE LID VALVE ASSEMBLY (ITEM NO. 3)

Tools : Slotted Screwdriver 1/8".

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Move or rotate handle bar to open position. Lift lid above front block and remove from fryer. Depress lid lock and remove handle bar from lid. Save handle bar for reuse
3. Remove lid lock from lid assembly end save for reuse.
4. Lift Lid and hold valve body with one hand. Grasp the lid valve retainer with the other hand and twist counterclockwise to loosen.
5. Remove lid valve retainer. Note that lid valve spring has closed coil on one end and open coil on the other. The open end goes toward the lid. Save spring and retainer for reuse.
6. Remove valve body and lower lid.
7. Lift lid and install new valve body on lid. Make sure the groove for the lid lock is toward the front. Lean the lid toward the back of the fryer.
8. Holding top part of valve with one hand, install spring, (open coil toward the lid). Using other hand turning clockwise, carefully screw retainer into valve body. Using only hand pressure, completely tighten retainer to valve body.
9. Lower lid and replace lid lock.
10. Depress lid lock, replace handle bar and place unit back into service

REPLACE HANDLE BAR CAM LOCK AND PRESSURE LOCK (ITEM NO. 2)

Tools : N/A

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired **CIRCUIT BREAKER MUST BE OFF.**
2. Move or rotate handlebar to open position. Lift lid above front block and rcmovo from fryer Depress Lid lock and remove handle bar from lid.
3. Install new handle bar in lid assembly and place unit back into service.

REPLACE HEATER HOLDER (ITEM NO. 31)

Tools: Nut driver 7/16"; Rubber Mallet.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply; drain shortening and allow to cool. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove lid from fryer.
3. Remove the two (2) nuts securing heater holder to cooking vessel wall.
4. Utilizing care not to damage heaters, remove heater holder.
5. Replace the two (2) nuts securing new heater holder to cooking vessel wall.
6. Utilizing care not to damage heaters, gently tap heaters with rubber mallet securing them in slots in heater holder.
7. Replace lid on fryer and place unit back into service.

REPLACE FUSE (ITEM NO. 53)

Tools: Phillips Screwdriver #2.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove the two screws securing eyebrow to relay panel and save for reuse.

CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in Step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure open position.
4. Unscrew fuse cap from fuseholder.
5. Remove defective fuse from fuseholder.
6. Insert new fuse into fuseholder.
7. Screw fuse cap back onto fuseholder.

8. Replace the four (4) screws securing escutcheon to relay panel.
9. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE DANGER LABEL PANEL (ITEM NO. 7)

Tools: Phillips Screwdriver #2.

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply. If unit is hardwired, ***CIRCUIT BREAKER MUST BE OFF.***
2. Place lid in down position.
3. Remove the four(4) screws securing danger label panel to rear of fryer and save for reuse.
4. Replace the four (4) screws securing new danger label panel to rear of fryer and place unit back into service.

REPLACE WHEEL (ITEM NO. 25)

Tools: Open End Wrench - 1/2" (Qty - 2)

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply, drain shortening and allow to cool. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**
2. Remove lid from fryer.
3. Pad floor with cardboard and lay fryer over on side.
4. Remove nut and bolt securing wheel to bracket and save for reuse.
5. Replace nut and bolt securing new wheel to bracket.
6. Return fryer to upright position, replace lid and place unit back into service.

REPLACE VENT ASSEMBLY (ITEM NO. 44)

Tools: Slotted Screwdriver - 1/4”; Phillips Screwdriver #2; Needle Nose Pliers.

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply. If unit is

hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Remove the seven (7) screws securing Danger Label panel and either left or right back panel (Servicer preference) to rear of fryer and save for reuse.

5. Remove weight from weight lifter.

6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 10).

7. Remove the four (4) screws securing vent block to vent assembly. Save screws, block and ball (if applicable) for reuse.

   NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (Located on vent block) with weight to regulate pressure.

8. Remove vent tube O-ring and save for reuse (See Figure 11).

9. Remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Leave vent block nut plate of vent tube for further use.

10. Line up hole in new vent assembly with vent tube and replace the four (4) screws securing assembly to rear of fryer. **NOTE:** Vent tube must protrude through vent assembly at least 1/2" (See Figure 12).

11. Place O-ring on vent tube and slide back against vent assembly.

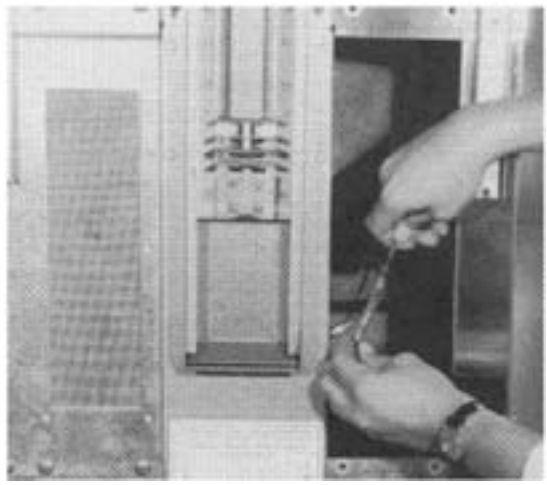


FIG. 10

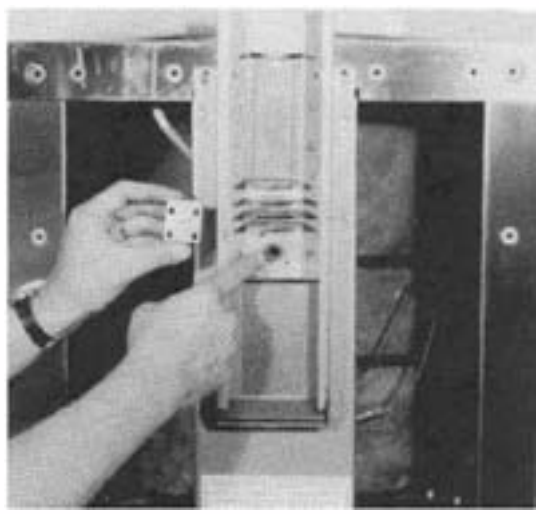


FIG. 11

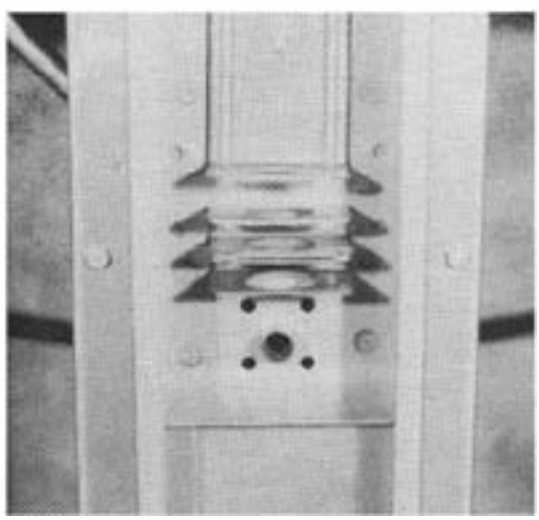


FIG. 12

CAUTION: Prior to applying final torque to screws in Step 12, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and /or personal injury.

12. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

13. Connect vent solenoid wires to harness wires at insulated terminals.

14. Drop vent ball (if applicable) down through waffle onto vent block.

15. Insert weight into weight lifter.

16. Place vent back onto vent assembly.

17. Replace the seven (7) screws securing Danger Label panel and back panel to rear of fryer.

18. Place muffler on fryer and place unit back into service.

REPLACE TEFLON SLIDE (ITEM NO. 62)

Tools: Phillips Screwdriver #2; Needle nose pliers.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize caution when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Remove the seven (7) screws securing Danger Label panel and either left or right back panel (Servicer preference) to rear of fryer and save for reuse.

5. Remove weight and save for reuse.

6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 13).

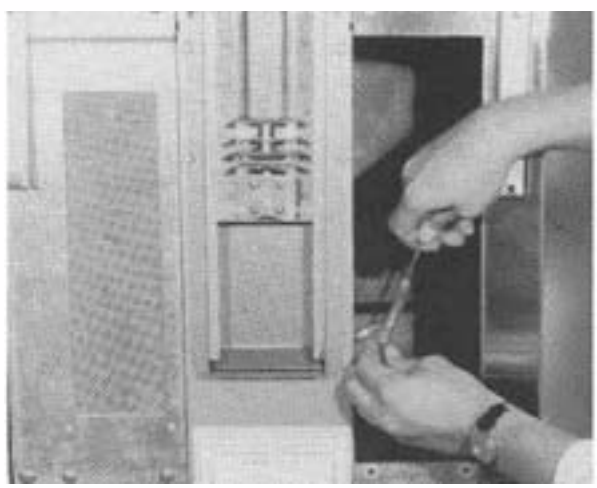


FIG. 13

7. Remove the four (4) screws securing vent block and ball (if applicable) to vent assembly. Save screws, block and ball (if applicable) for reuse .

NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

8. Remove vent tube O-ring and save for reuse (See Figure14).

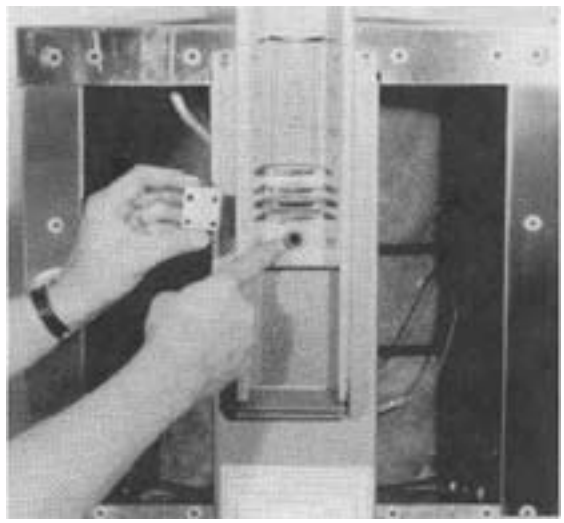


FIG.14

9. Remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Leave vent block nut plate on vent tube for further use.

10. Remove vent spring and save for reuse. Note how spring is mounted to bracket and weight lifter to ensure proper installation when replaced.

11. Remove cotter pin releasing solenoid plunger from weight lifter. Save cotter pinfor reuse.

12. Remove weight lifter and save for reuse.

13. Remove damaged or worn teflon slide from lifter arm and replace with new teflon slide.

14. With teflon slide in place and weight lifter in upright position, insert weight lifter arm through slot in vent assembly. Insert cotter pin through solenoid plunger and weight lifter arm. Secure cotter pin in place by bending (See Figure 15).

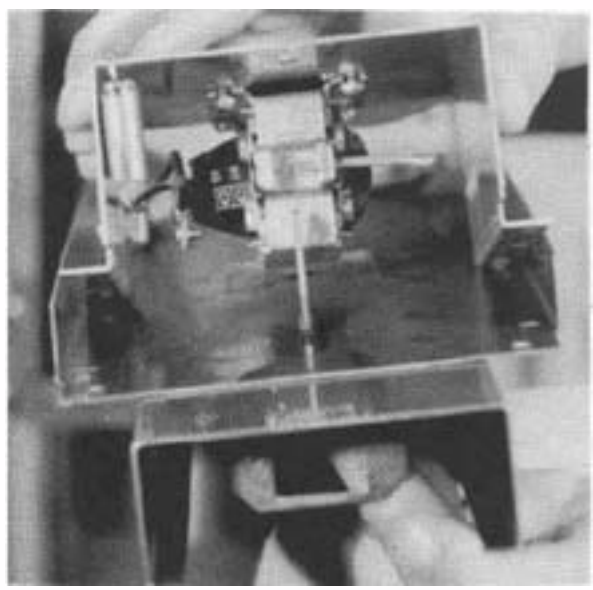


FIG.15

15. Replace vent spring securing weight lifter to solenoid bracket. Vent spring is mounted between notch in top of vent solenoid bracket and hole in weight lifter arm.

NOTE: Utilize care in preventing spring from twisting when replacing. If twisted, undue tension produced could result in a chattering noise and pressure reduction during cook cycle.

16. Manually depress and release weight lifter several times to ensure smooth unrestricted travel prior to reassembly.

17. Replace the four (4) screws securing vent assembly to rear of fryer. **NOTE:** Vent tube must protrude through vent assembly at least l/2" (See Figure 16).

18. Connect the two (2) solenoid wires to harness wires.

19. Place O-ring over vent tube and slide back against vent assembly.

CAUTION: Prior to applying final torque to screws in Step 20, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

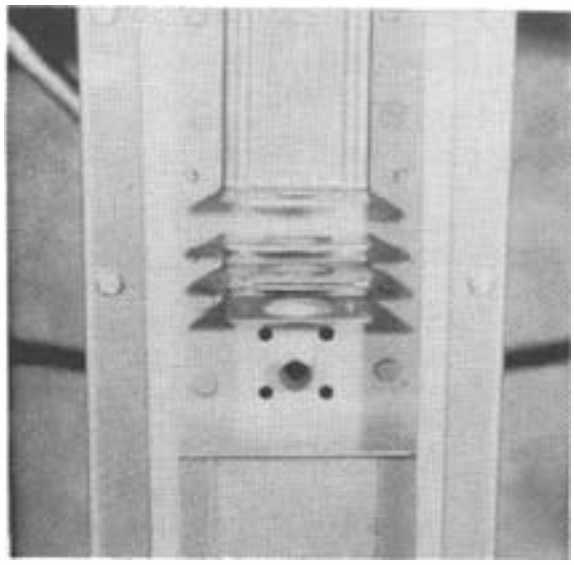


FIG. 16

20. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) screws securing block onto vent tube and vent assembly.

21. Drop vent ball (if applicable) down through waffle onto vent block.

22. Place weight down in weight lifter.

23. Place vent back onto vent assembly.

24. Replace the seven (7) screws securing back panel and Danger Label panel to rear of fryer.

25. Place muffler onto vent back and place unit back into service.

REPLACE COTTER PIN (ITEM NO. 60)

Tools: Phillips Screwdriver #2; Needle Nose Pliers.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Stop 3. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Remove the seven (7) screws securing Danger Label panel and either left or right back panel (Servicer preference) to rear of fryer.

5. Remove weight from weight lifter.

6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 17).

7. Remove the four (4) screws securing vent block to vent assembly. Save screws, block and ball (if applicable) for reuse.

   NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

8. Remove vent tube O-ring and save for reuse (See Figure 18).

9. Remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Leave vent block nut plate on vent tube for further use.

10. Remove vent spring and save for reuse. Note how spring is mounted to bracket and weight lifter to ensure proper installation when replacing.

11. Remove defective cotter pin releasing weight lifter arm from solenoid plunger.

12. Install new cotter pin in solenoid plunger capturing weight lifter. Spread cotter pin to prevent disengagement of plunger and lifter arm.

13. Replace vent spring securing weight lifter to solenoid bracket. Vent spring is mounted between notch in top of vent solenoid bracket and hole in weight lifter arm.

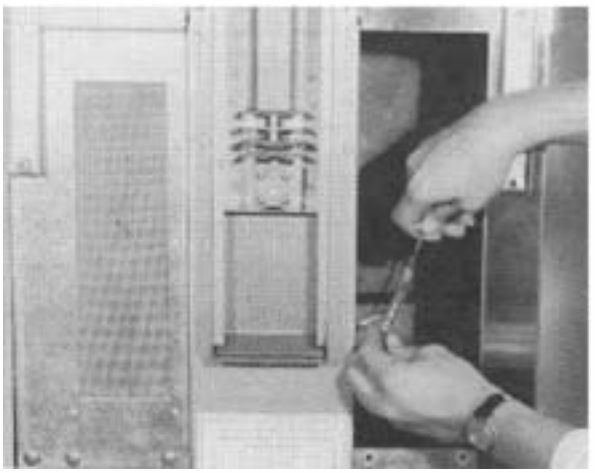


FIG. 17

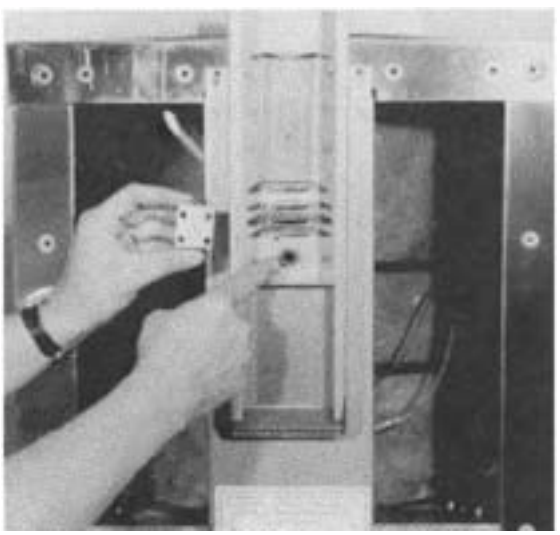


FIG. 18

NOTE: Utilize care in preventing spring from twisting when replacing. This could create undue tension resulting in a loud chattering noise and pressure reduction during cook cycle.

14. Manually depress and release weight lifter several times to ensure smooth unrestricted travel prior to reassembly.

15. Replace the four (4) screws securing vent assembly to rear of fryer. NOTE: Vent tube must protrude through vent assembly at least 1/2" (See Figure 19).

16. Place O-ring over vent tube and slide back against vent assembly.

17. Replace vent block on vent tube and replace four screws securing vent block to vent assembly. Be careful to align the vent block square with the bottom of the weight lifter.

18. Connect vent solenoid wires to harness wires at insulated terminals.

19. Drop vent ball (if applicable) down through waffle onto vent block.

20. Place weight down in weight lifter.

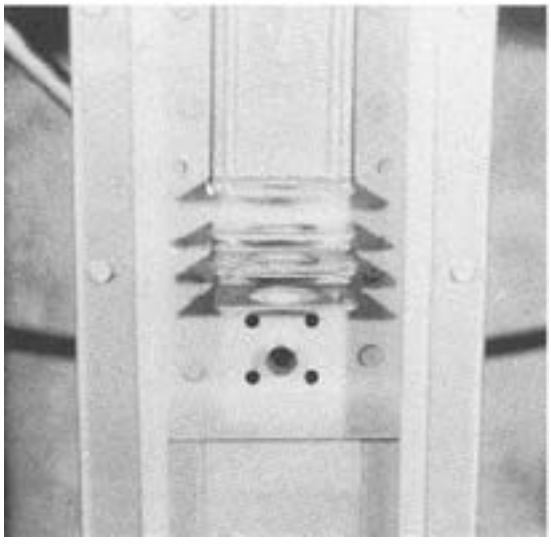


FIG. 19

21. Place vent back onto vent assembly.

22. Replace the seven (7) screws securing back panel and Danger Label panel to fryer.

23. Place muffler onto vent back and place unit back into service.

REPLACE VENT TUBE O-RING (ITEM NO. 43)

Tools: Phillips Screwdriver # 2; Needle Nose Pliers.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Rmove the seven (7) screws securing Danger Label panel and either left or right back panel (Servicer preference) to rear of fryer and save for reuse.

5. Remove weight from weight lifter.

6. Remove the four (4) screws securing vent block to vent assembly. Save screws, block and ball (if applicable) for reuse.

NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

7. Remove defective vent tube O-ring and discard (See Figure 20).

8. Install new O-ring on vent tube.

CAUTION: Prior to applying final torque to screws in Step 9, verify solenoid wires are not pinched between nut plate and vent assembly. This could create as shorted circuit causing possible equipment damage and/or personal injury.

9. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

10. Drop vent ball (if applicable) down through waffle onto vent block.

11. Place weight down in weight lifter.

12. Place vent back onto vent assembly.

13. Replace the seven (7) screws securing back panel and Danger Label panel to fryer.

14. Place muffler onto vent back and place unit back into service.

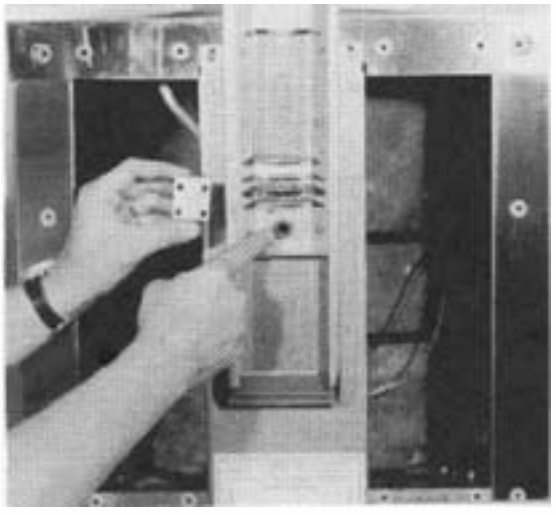


FIG. 20

REPLACE WEIGHT LIFTER (ITEM NO. 61)

Tools: Slotted Screwdriver; Phillips Screwdriver #2; Needle Nose Pliers.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.
3. Lift and remove vent back and save for reuse.
4. Remove weight and save for reuse.
5. Remove the seven (7) screws securing Danger Label panel and back panel on either left or right hand side (servicer preference) and save for reuse. Remove back panel.
6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 21).
7. Remove the four (4) screws securing vent block and ball (if applicable) to vent assembly. Save screws, block and ball (if applicable) for reuse.

   NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

8. Remove vent tube O-ring.
9. Remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Remove vent assembly.
10. Remove.vent spring and save for reuse
11. Remove vent solenoid cotter pin and save for reuse.
12. Remove defective weight lifter assembly.

    With teflon slide in place and weight lifter in upright position, insert weight lifter arm through slot in vent assembly. Insert cotter pin through solenoid and weight lifter arm. Secure cotter pin in place by bending (See Figure 22).

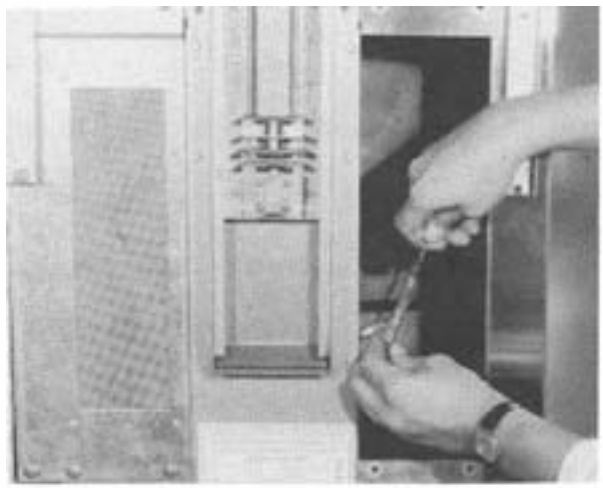


FIG. 21

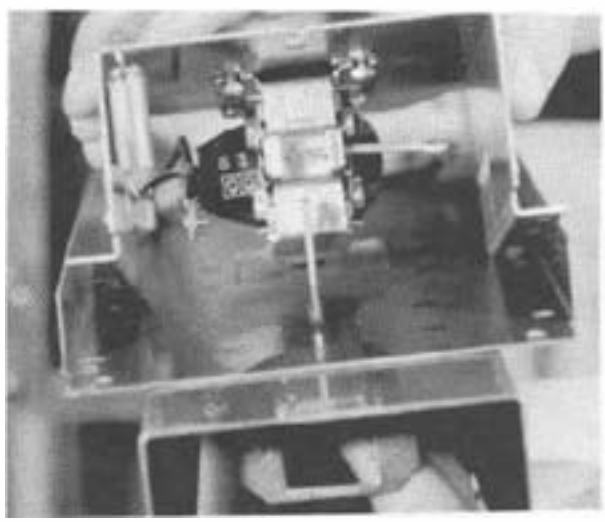


FIG. 22

14. Replace vent spring securing weight lifter to solenoid bracket. Vent spring is mounted between notch in top of vent solenoid bracket and hole in weight lifter arm.

    NOTE: Utilize care in preventing spring from twisting when replacing. If twisted, undue tension produced could result in a chattering noise and pressure reduction during cook cycle.

15. Manually depress and release weight lifter several times to ensure smooth unrestricted travel prior to reassembly.

16. Replace the four (4) screws securing vent assembly to rear of fryer. **NOTE:** Vent tube must protrude through vent assembly at lease 1/2" (See Figure 23).

17. Connect the two (2) solenoid wires to harness wires.

18. Place O-ring over vent tube and slide back against vent assembly.

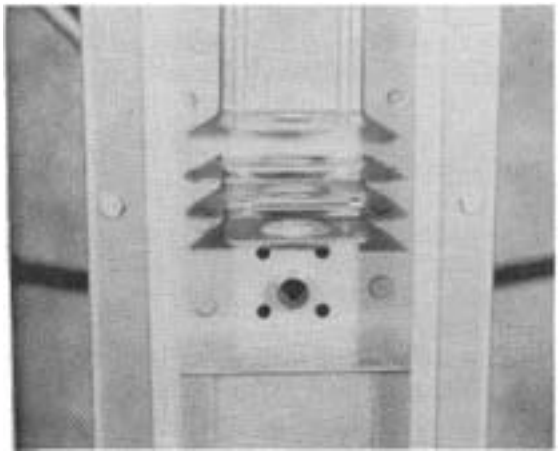


FIG. 23

CAUTION: Prior to applying final torque to screws in Step 19,verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

19. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) *crews securing block onto vent tube and vent assembly.

20. Drop vent ball (if applicable) down through waffle onto vent block.

21. Place weight down in weight lifter.

22. Place vent back onto vent assembly.

23. Replace the seven (7) screws securing back panel and Danger Label panel to rear of fryer.

24. Place muffler onto vent back and place unit back into service.

REPLACE VENT TUBE (ITEM NO. 56)

Tools: Slotted Screwdriver; Phillips Screwdriver #2; Silicone Sealant; Open End Wrench - 13/16"

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink

3. Lift and remove vent back and save for reuse.

4. Remove the 14 screws securing Danger Label panel and rear panels to side panels. Save panels and screws for reuse.

5. Remove weight from weight lifter and save for reuse.

6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 24).

7. Remove the four (4) screws securing vent block and ball (if applicable) to vent assembly. Save screws, block and ball (if applicable) for reuse.

   NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

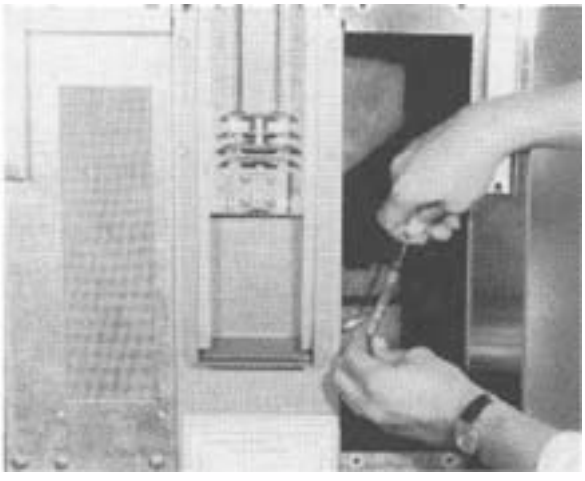


FIG. 24

8. Remove vent tube O-ring.

9. Remove the four (4) screws securing vent assembly to rear of fryer. Remove vent assembly and vent block nut plate. Save screws, vent assembly and nut plate for reuse.

10. Remove compression nut securing vent tube to cooking vessel. Note position of vent tube prior to removal to ensure proper installation of new tube. Remove vent tube, ferrule and nut.

11. Place compression nut over correct end of new vent tube. Place ferrule on vent tube in front of compression nut and insert in bushing of cooking vessel. Apply silicone sealant around ferrule then start compression nut. **DO NOT TIGHTEN**. Place nut plate on vent tube.

12. Place vent assembly on rear of fryer noting position of vent tube. Adjust vent tube **WITHOUT BENDING** matching end of tube with hole in vent assembly. Replace the four (4) screws securing vent assembly to rear of fryer. **NOTE**: Vent tube must protrude through vent assembly at least l/2" (See Figure 25).

13. Tighten compression nut securing vent tube to cooking vessel.

14. Connect vent solenoid wires to harness wires.

15. Place O-ring over vent tube and slide back against vent assembly.

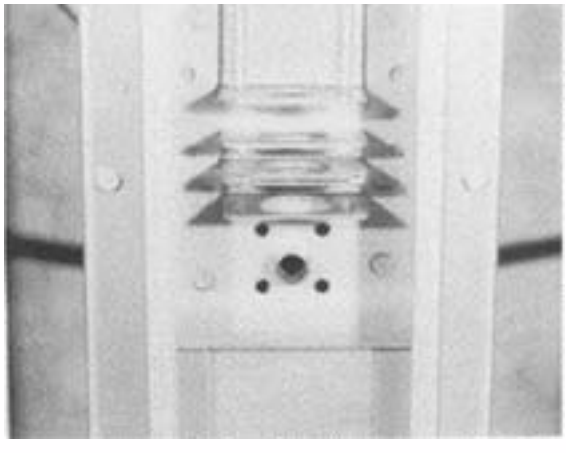


FIG. 25

CAUTION: Prior to applying final torque to screws in Step 16, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

16. Place vent block on vent tube. Line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

17. Drop vent ball (if applicable) down through waffle onto vent block.

18. Place weight down in weight lifter.

19. Place vent back onto vent assembly.

20. Replace the 14 screws securing back panels and Danger Label panel to rear of fryer.

21. Place muffler onto fryer and place unit back into service.

REPLACE WEIGHT (ITEM NO. 38)

Tools: N/A

Procedure:

1. **DANGER :** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Remove defective weight from weight lifter.

5. Insert new weight into weight lifter.

6. Place vent back onto vent assembly.

7. Place muffler onto fryer and place unit back into service.

REPLACE HINGE BLOCK (REAR) (ITEM NO. 29)

Tools: Phillips Screwdriver #2; Slotted Screwdriver; Box End Wrench - 9/I6"; Open End Wrench - 1-3/16"; Putty Knife; Hammer; Gloves.

Procedure

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, CIRCUIT BREAKER MUST BE OFF.

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.
3. Remove lid from fryer.
4. Lift and remove vent back.
5. Remove weight from weight lifter.
6. Remove the 14 screws securing Danger Label panel and back panels to fryer. Save screws and panels for reuse.
7. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 26).
8. Remove the four (4) screws securing vent block to vent assembly. Save screws, block and ball (if applicable) for reuse.

   NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

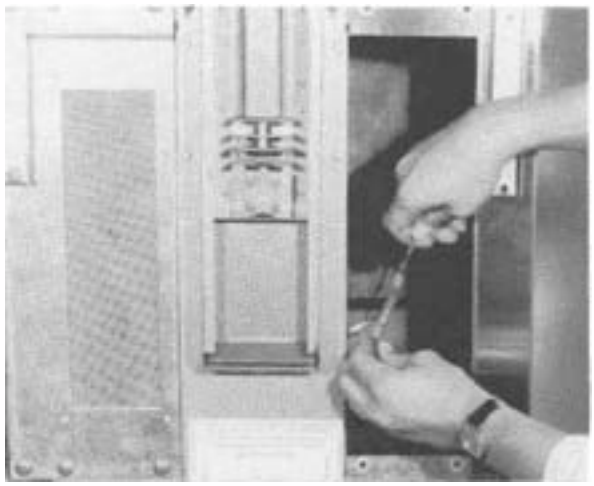


FIG. 26

9. Remove vent tube O-ring and save for reuse.
10. Remove the four (4) screws securing vent assembly to rear of fryer. Remove vent assembly and vent block nut plate. Save screws, vent assembly and nut plate for reuse.

CAUTION: Utilize care when performing Step 11. Do to location and amount of torque required to remove nuts, wear gloves for protection in case of wrench slipping.

11. Remove compression nut securing vent tube to cooking vessel. Note position of tube prior to removal to ensure proper reinstallation. Remove vent tube and save for reuse.
12. Remove the three (3) nuts securing rear block to top of fryer. Remove defective rear block.
13. Remove any residue of old silicone sealant from top of fryer.
14. Apply silicone sealant to entire base of new rear block and mount on fryer. Place lock washers on bolts and tighten the three (3) nuts securing rear block to fryer.
15. Place compression nut over correct end of vent tube. Place ferrule on vent tube in front of compression nut and insert in bushing of cooking vessel. Apply silicone sealant around ferrule then start compression nut. **DO NOT TIGHTEN.**

16. Place vent assembly on rear of fryer noting position of vent tube. Adjust vent tube **WITHOUT BENDING** matching end of tube with hole in vent assembly. Replace the four (4) screws securing vent assembly to rear of fryer. **NOTE:** Vent tube must protrude through vent assembly at least 1/2" (See Figure 27).

17. Tighten compression nut securing vent tube to cooking vessel.

18. Connect vent solenoid wires to harness wires.

19. Place o-ring over vent tube and slide back against vent assembly.

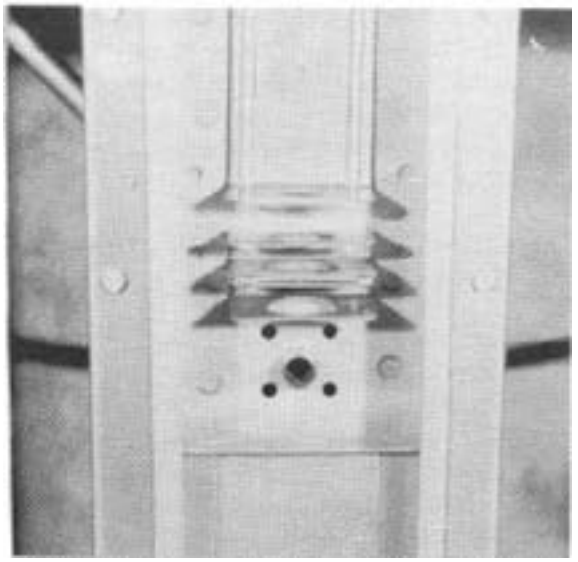


FIG.27

CAUTION: Prior to applying final torque to screws in Step 20, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

20. Place vent block on vent tube. Line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

21. Drop vent ball (if applicable) down through waffle onto vent block.

22. Place weight down in weight lifter.

23. Place vent back onto vent assembly.

24. Replace the 14 screws securing back panels and Danger Label panel to rear of fryer.

25. Place muffler onto vent back.

26. Place lid on fryer and put unit back into service.

REPLACE VENT SPRING (ITEM NO. 58)

Tools: Phillips Screwdriver #2; Slotted Screwdriver; Needle Nose Pliers.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Remove the seven (7) screws securing Danger Label panel and right rear panel to fryer. Save panels and screws for reuse.

5. Remove weight from weight lifter and save for reuse.

6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 23).

7. Remove the four (4) screws securing vent block to vent assembly. Save screws, block and ball (if applicable) for reuse.

   NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure

8. Remove vent tube O-ring and save for reuse (See Figure 29).

9. Remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Leave vent block nut plate on vent tube for further use.

10. Remove defective vent spring and discard.

11. Replace vent spring securing weight lifter to solenoid bracket. Vent spring is mounted between notch in top of vent solenoid bracket and hole in weight lifter arm.

12. Manually depress and release weight lifter several times to ensure smooth, unrestricted travel prior to reassembly.

13. Replace the four (4) screws securing vent assembly to rear of fryer. **NOTE:** Vent tube must protrude through vent assembly at least l/2" (See Figure 30).

14. Connect the two (2) solenoid wires to harness wires.

16. Place O-ring over vent tube and slide back against vent assembly.

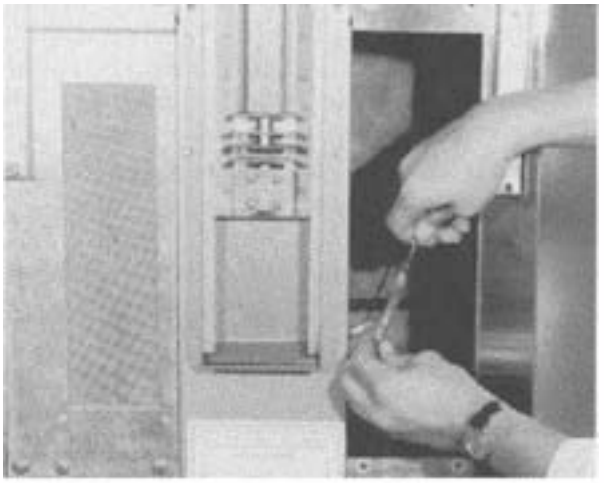


FIG.28

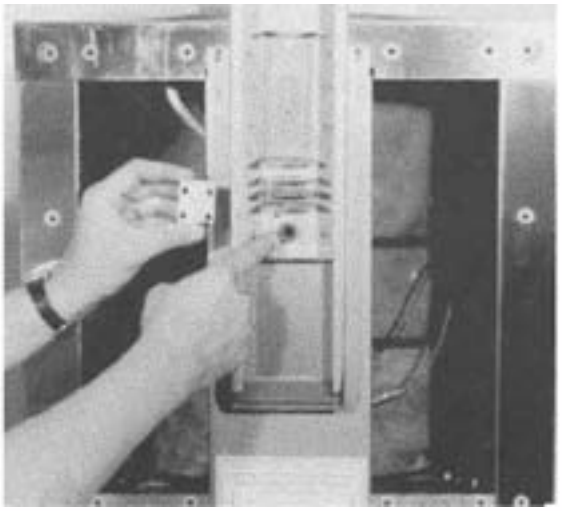


FIG.29

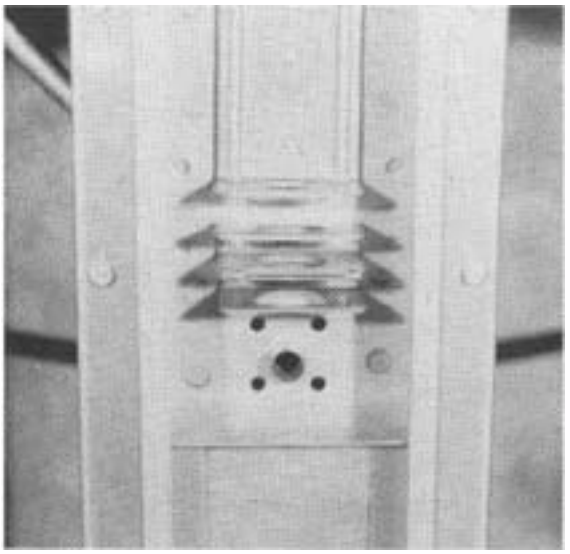


FIG.30

CAUTION: Prior to applying final torque to screws, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

16. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

17. Drop vent ball (if applicable) down through waffle onto vent block.

18. Place weight down in weight lifter.

19. Place vent back onto vent assembly.

20. Replace the seven (7) screws securing back panel and Danger Label panel to fryer.

21. Place muffler onto vent back and place unit back into service.

REPLACE VENT SOLENOID (ITEM NO. 59)

Tools: Phillips Screwdriver #2; Slotted Screwdriver; Nut Driver - 5/16"; Nut Driver 3/16".

Procedures:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.

3. Lift and remove vent back.

4. Remove the seven (7) screws securing Danger Label panel and right rear panel to fryer. Save panels and screws for reuse.

5. Remove weight from weight lifter.

6. Disconnect the two (2) vent solenoid wires from harness wires at insulated terminals (See Figure 31).

7. Remove the four (4) screws securing vent block to vent assembly. Save screws, block and ball (if applicable) for reuse.

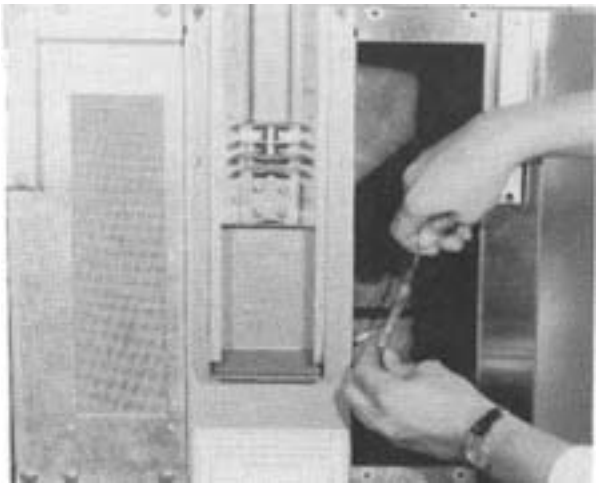


FIG.31

NOTE: Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

8. Remove vent tube O-ring and discard (See Figure 32).

9. Remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Leave vent block nut plate on vent tube for further use.

10. Remove vent spring and save for reuse. Note how spring is mounted to bracket and weight lifter to ensure proper installation when replaced.

11. Remove cotter pin releasing solenoid arm from weight lifter.

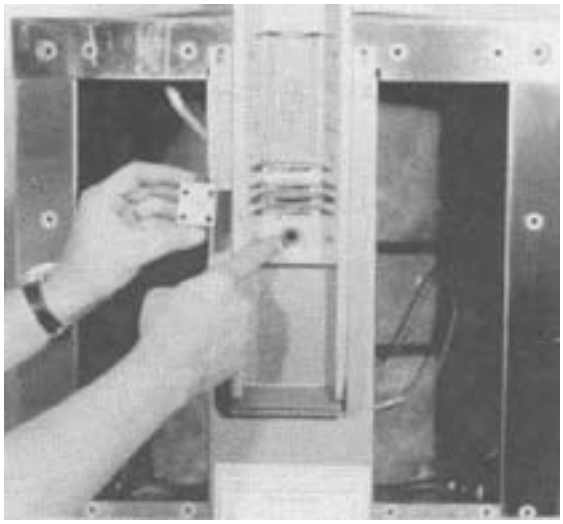


FIG. 32

12. Remove the four (4) screws securing solenoid bracket to vent assembly. Save screws and nuts for reuse.

13. Remove the four (4) screws securing solenoid to bracket. Save screws and nuts for reuse.

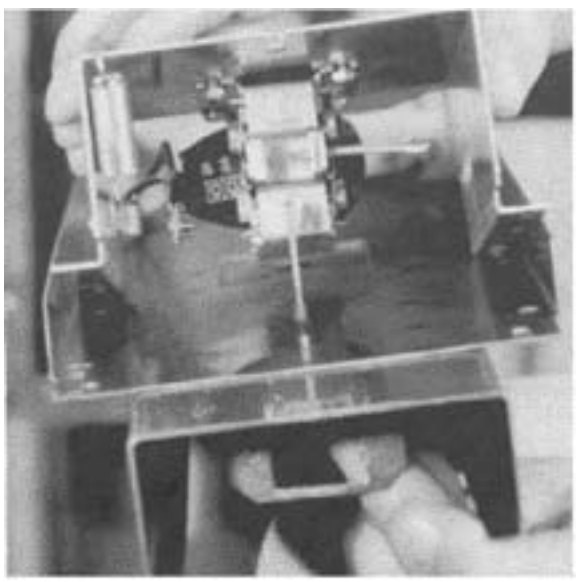
14. Transfer wires from coil of defective solenoid to coil of new solenoid.

15. Replace the four (4) screws and nuts securing new solenoid to bracket.

16. Replace the four (4) screws and nuts securing solenoid bracket to vent assembly.

17. With teflon slide in place and weight lifter in upright position, insert weight lifter arm through slot in vent assembly. Insert cotter pin through holes in solenoid and weight lifter arm. Secure cotter pin by bending (See Figure 33).

18. Replace vent spring securing weight lifter to solenoid bracket. Vent spring is mounted between notch in top of vent solenoid bracket and hole in weight lifter arm.



FUG.33

NOTE: Utilize care in preventing spring from twisting when replacing. If twisted, undue tension produced could result in a chattering noise and pressure reduction during cook cycle.

19. Manually depress and release weight lifter several times to ensure smooth unrestricted travel prior to reassembly.

20. Replace the four (4) screws securing vent assembly to rear of fryer. NOTE: Vent tube must protrude through vent assembly at least 1/2" (See Figure 34).

21. Connect the two (2) solenoid wires to harness wires.

22. Place new O-ring over vent tube and slide back against vent assembly.

CAUTION: Prior to applying final torque to screws in Step 23, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

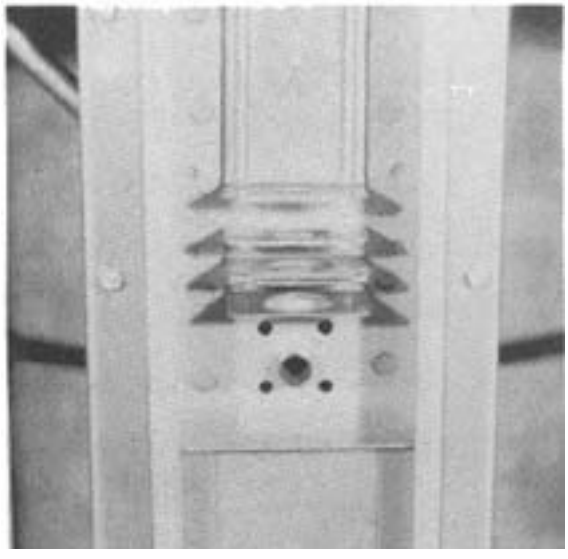


FIG. 34

23. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

24. Drop vent ball (if applicable) down through waffle onto vent block.

25. Place weight down in weight lifter.

26. Place vent back onto vent assembly.

27. Replace the seven (7) screws securing back panel and Danger Label panel to rear of fryer.

28. Place muffler onto fryer and place unit back into service.

REPLACE DRAIN VALVE (ITEM NO. 13)

Tools: Nut Driver - 5/16”; Open End Wrench - 7/l6”; Wrench - l-3/16”.

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply, drain shortening and allow to cool. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Remove nut securing drain valve extension handle to drain valve and save for reuse

3. Remove the two (2) screws securing locking plate to drain valve bracket and save for reuse.

4. Remove drain valve.

CAUTION: Utilize care not to apply too much torque to drain valve in Step 4 causing bushing connected to fryer to crack or separate from cone.

5. Place locking plate over new drain valve. Note location of holes in drain valve bracket. Holes in locking plate when placed over drain valve must line up with holes in bracket.

6. Apply pipe sealant to threads of new drain valve.

7. Insert new drain valve through bracket and secure to cooking vessel.

8. Replace screws and nuts securing locking plate to bracket.

9. Replace nut securing drain valve extension handle to drain valve.

CAUTION: Make sure drain valve is closed (handle in UP position) prior to filling with shortening.

REPLACE INDICATOR LAMP (ITEM NO. 10, 11, 19)

Tools: Phillips Screwdriver #2; Needle Nose Pliers.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

   CAUTION: Utilize care in preventing escutcheon from falling forward when removing screws in step 3.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Remove wires connected to indicator lamp.

5. Using needle nose pliers, depress retaining ears while pushing indicator lamp through escutcheon.

6. Insert new indicator lamp through escutcheon until retaining ears open, securing lamp to escutcheon.

7. Connect wires to new indicator lamp.

8. Replace the four (4) screws securing escutcheon to relay panel.

9. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE VENT BLOCK (ITEM NO. 39)

Tools: Slotted Screwdriver; Phillips Screwdriver #2.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired **CIRCUIT BREAKER MUST BE OFF.**

CAUTION: Utilize care when removing muffler in Step 2. Muffler may contain very hot water.

2. Remove muffler and place in sink.
3. Lift and remove vent back.
4. Remove the seven (7) screws securing Danger Label panel and back panel on either left or right hand side (servicer preference) and save for reuse. Remove back panel.
5. Remove weight from weight lifter.
6. Remove the four (4) screws securing vent block to vent assembly. Remove block, ball (if applicable) and O-ring.

NOTES:

Some 4-Head and 6-Head models utilize a stainless steel vent ball (located on vent block) with weight to regulate pressure.

Each new vent block kit contains replacement screws and a vent block nut plate. Servicer must use own discretion whether nut plate must be replaced. If nut plate must be replaced, remove the four (4) screws securing vent assembly to rear of fryer and save for reuse. Remove vent assembly being careful not to apply tension to vent solenoid wires. Remove defective nut plate and discard. Place new nut plate on vent tube. Place vent assembly back onto rear of fryer making sure vent tube protrudes through vent assembly at least 1/2" (See Figure 35). Replace the four (4) screws securing vent assembly to rear of fryer. If nut plate does not need replacing, proceed to Step 7.

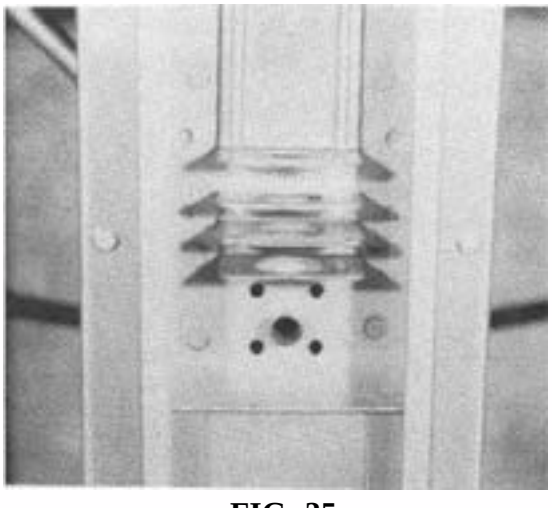


FIG. 35

7. Place new O-ring over vent tube and slide back against vent assembly.

CAUTION: Prior to applying final torque to screws in Step 8, verify solenoid wires are not pinched between nut plate and vent assembly. This could create a shorted circuit causing potential equipment damage and/or personal injury.

8. Place vent block on vent tube, line up nut plate behind vent assembly and replace the four (4) screws securing block to vent tube and vent assembly.

9. Drop vent ball (if applicable) down through waffle onto vent block.

10. Insert weight into weight lifter.

11. Place vent back onto vent assembly.

12. Place muffler on fryer and place unit back into service.

REPLACE LATCH BLOCK (FRONT) (ITEM NO. 8)

Tools: Phillips Screwdriver #2; Box End Wrench - 9/16"; Silicone Sealant; Hammer; Putty Knife.

Procedure:

1. **DANGER:** Turn off electrical power and disconnect electrical power supply. If unit is hardwired **CIRCUIT BREAKER MUST BE OFF.**

2. Remove lid assembly and save for reuse.

3. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

4. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. **CAUTION:** Utilize care in preventing escutcheon from falling forward when removing these screws. Lower escutcheon slowly until secure in open position.

5. Remove the four (4) screws securing relay panel to side panels and save for reuse. **CAUTION:** Utilize care in preventing relay panel from falling forward when removing these screws. Lower panel slowly until secure (See Figure 36).

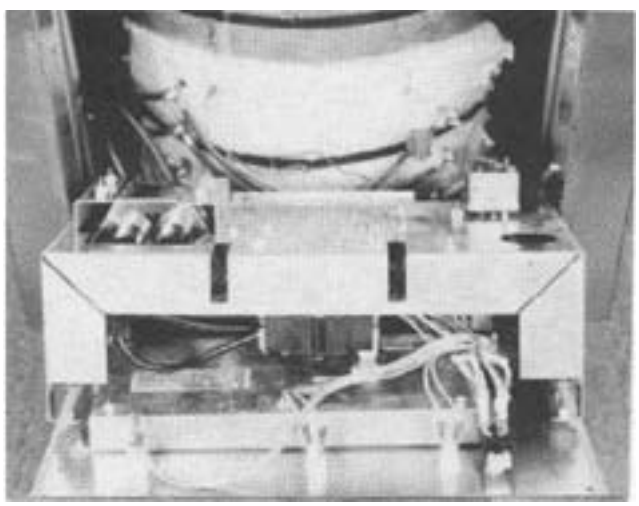


FIG. 36

CAUTION: Utilize care in performing Step 6. Due to location and amount of torque required to remove nuts, wear gloves for protection in the case of wrench slipping.

6. Remove the three (3) nuts securing front block to top of fryer. Remove defective front block.

7. Remove any residue of old silicone sealant from top of fryer.

3. Apply silicone sealant to entire base of new front block and mount on fryer. Place lock washers on bolts end tighten the three (3) nuts securing front block to fryer.

9. Replace the four (4) screws securing relay panel to side panels.

10. Replace the four (4) screws securing escutcheon to relay panel.

11. Replace the two (2) screws securing eyebrow to relay panel and place unit back into service.

REPLACE MAIN CIRCUIT BOARD

Tools: Phillips Screwdriver #2; Nut Driver -11/32”

Procedure:

1. **DANGER:** Turn off electrical power, disconnect electrical power supply, drain shortening and allow to cool. If unit is herdwired, **CIRCUIT BREAKER MUST BE OFF.**

2. Remove the two (2) screws securing eyebrow to relay panel and save for reuse.

3. Remove the four (4) screws securing escutcheon to relay panel and save for reuse. Lower escutcheon slowly until secure in open position.

4. Unplug the 15 pin molex connector from circuit board.

5. Remove the four (4) nuts securing circuit board to esctcheon.

6. **CAUTION:** Pull circuit board back from escutcheon slowly until membrane panel connector strip is visible. Unplug strip from circuit board.

7. Plug strip into new circuit board. **NOTE:** Verify pins in strip align properly with pins in circuit board.

8. Replace the four (4) nuts securing new circuit board to escutcheon.

9. Plug molex connector into circuit board.

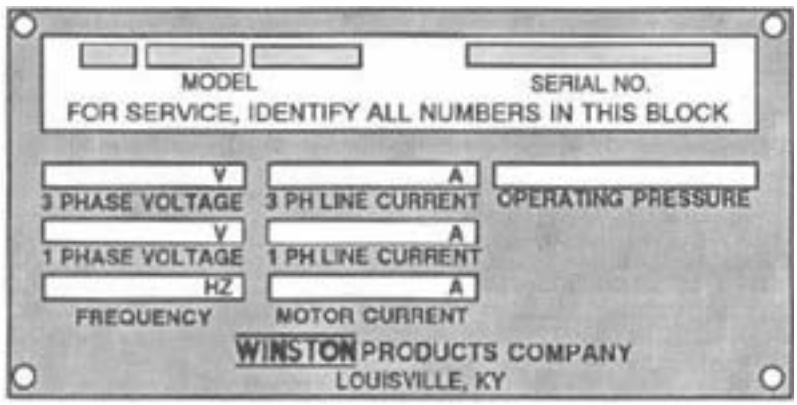
10. Replace the four (4) screws securing escutcheon to relay panel.

11. Replace the two (2) screws securing eyebrow to rolay panel.

NOTE: Progrmming of new circuit board may be required. Verify programming in each channel prior to placing unit back into service.

OBTAINING SERVICE

ALWAYS REFER TO THE MODEL NUMBER AND SERIAL NUMBER WHEN REQUIRING SERVICE OR WHEN PLACING A PARTS ORDER.



Use only genuine Winston Products replacement parts in your appliance. Refer to the parts identification section of this manual to identify the part(s) needed.

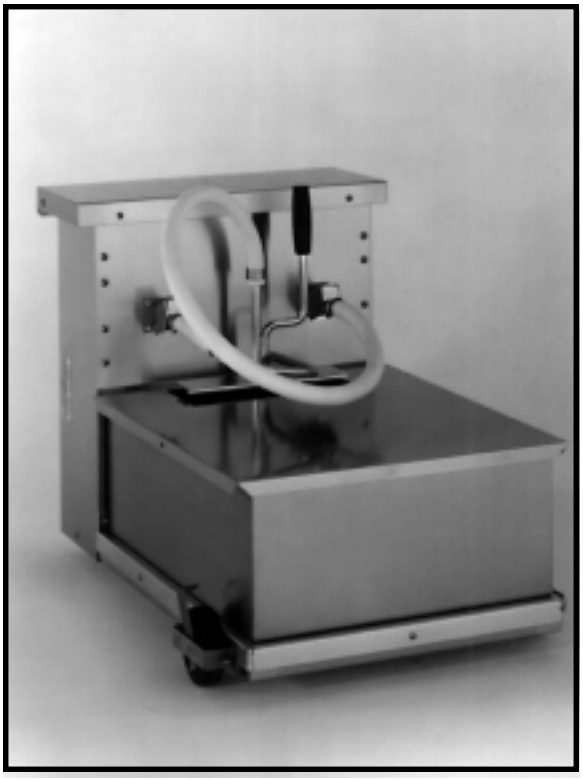
PROCEDURES FOR REPLACING NEW COMPONENTS ARE INCLUDED IN THIS MANUAL. FOLLOW THOSE INSTRUCTIONS CAREFULLY.

To order parts or obtain other information, contact:

WINSTON PRODUCTS COMPANY
2345 Carton Drive
Louisville, Kentucky 40299
(502) 495-5400

Customer Service (800) 234-5286

Winston
Shortening Filter
Parts Identification Manual



WINSTON PRODUCTS CO.
2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

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WINSTON SHORTENING FILTER

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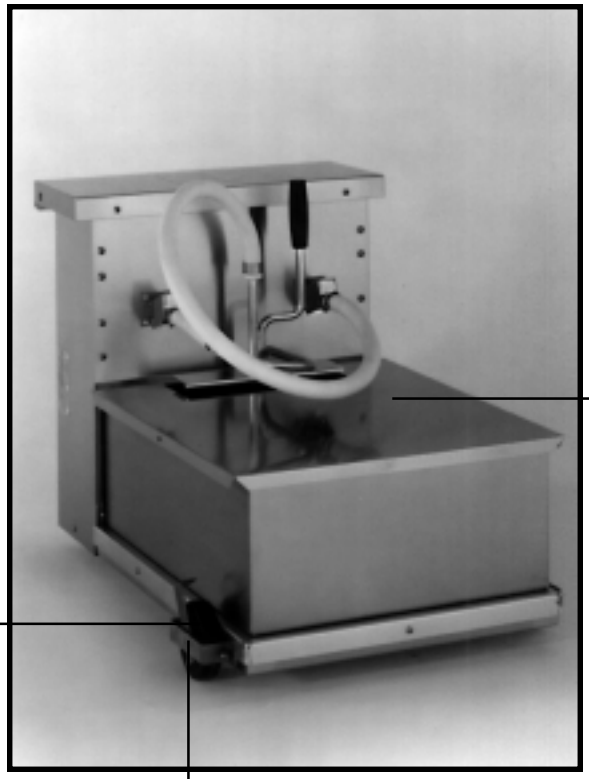
WINSTON SHORTENING FILTER

Parts Identification

NOTE: See pages 4 - 5 for Parts Descriptions and Order Numbers



To order parts, contact your Winston representative or call the International office:

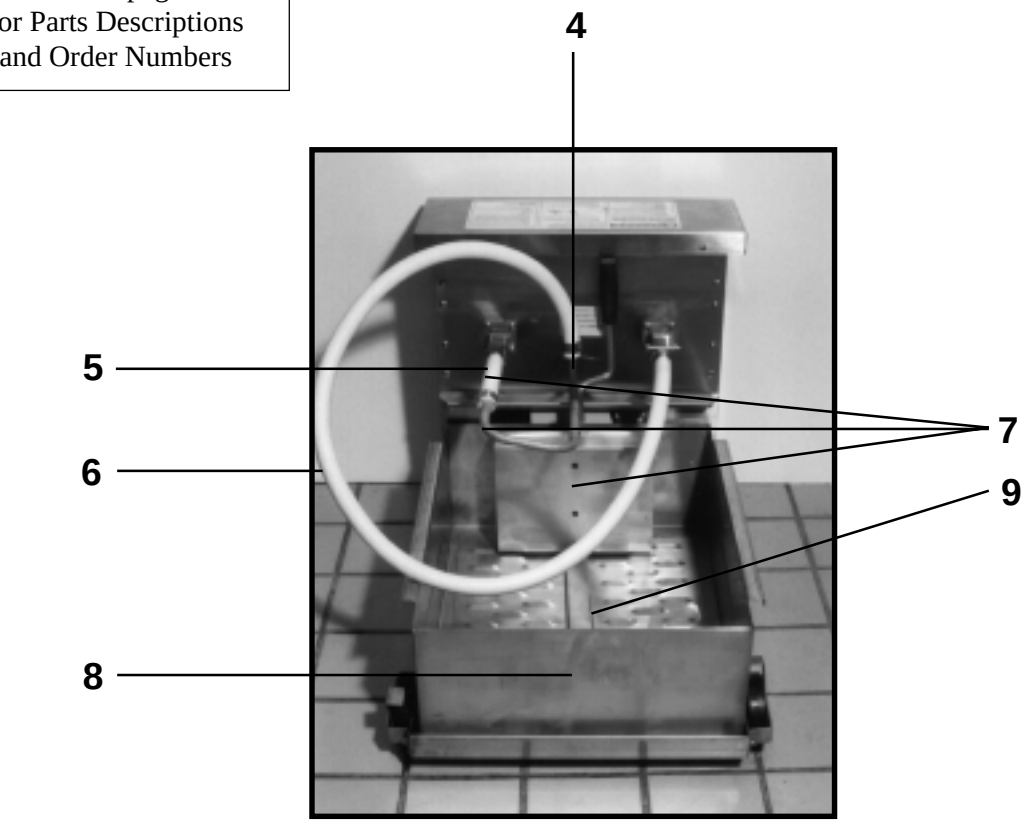
Winston Products Co.

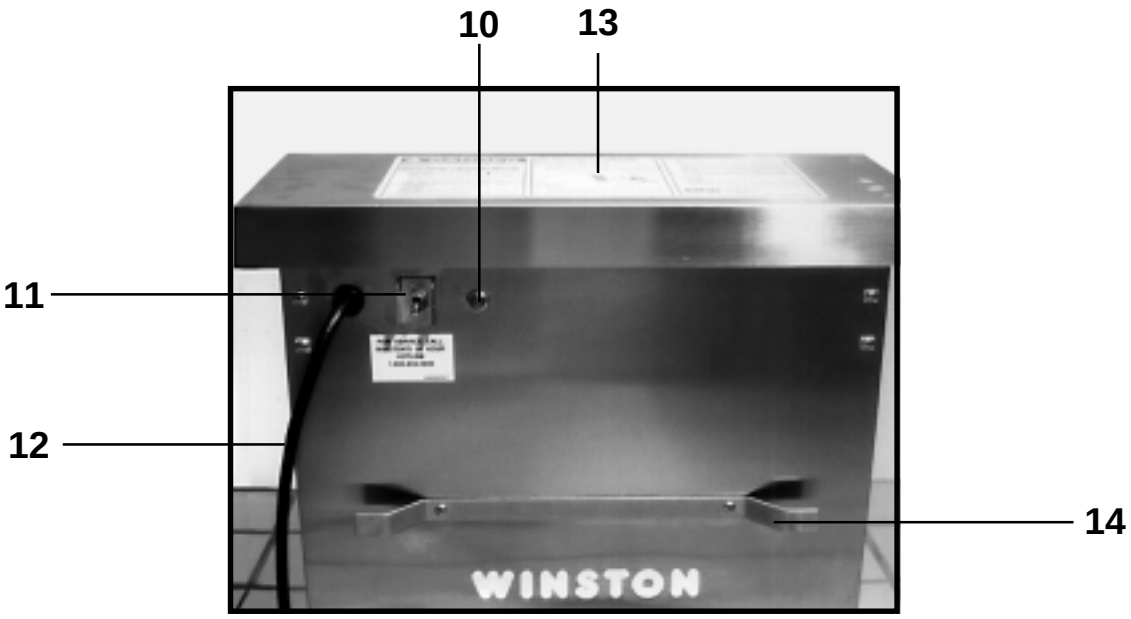
(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON SHORTENING FILTER

Parts Identification

NOTE: See pages 4 - 5 for Parts Descriptions and Order Numbers





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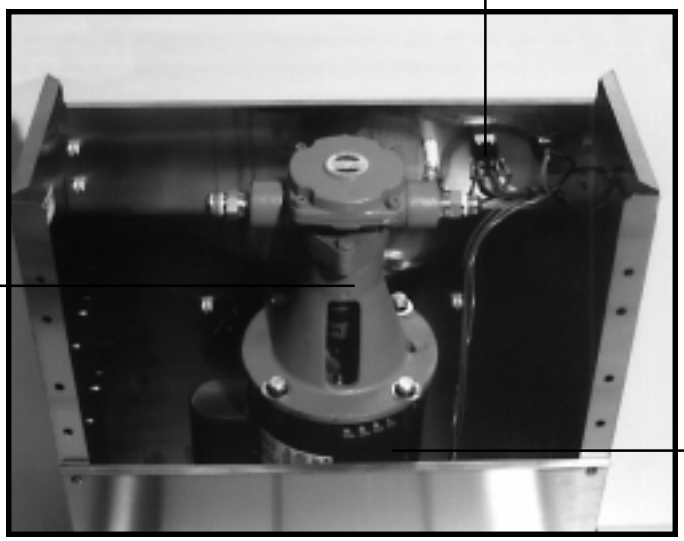

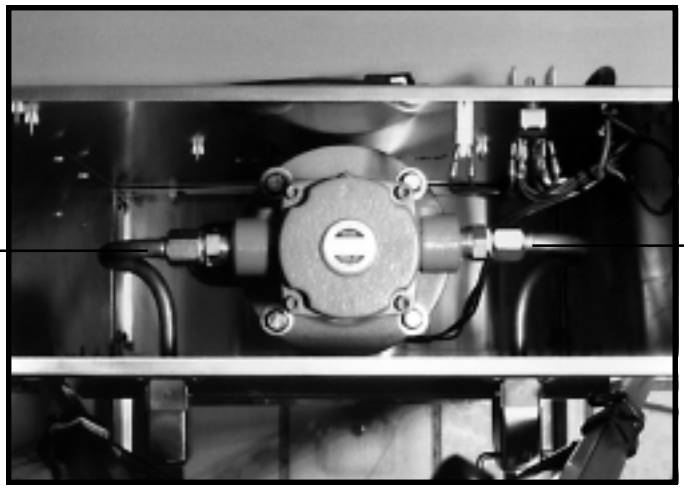

WINSTON SHORTENING FILTER
Parts Identification

Photo Reference Number	Part Description	Order Number
1	Tank Cover	HPS2055
2	Wheel	HPS1226/2
	Caster Assembly (option - not shown for F662 model)	HPS2232/2
3	Wheel Bracket	HPS1743/2
4	Hose/Wand Assembly	HPS1558
5	Filter Hose *(7.5")*	HPS1540
6	Filter Hose *(60")*	HPS1539
7	Filter Tube/Clamp Assembly *(F552)* Filter Tube/Clamp Assembly *(F662)*	HPS1572 HPS1583
8	Tank *(F552)* Tank *(F662)*	HPS1696 HPS1544
9	Filter Plate *(F552)* Filter Plate *(F662)*	HPS1563 HPS1562
10	Power On Lamp *(120 Volt)* Power On Lamp *(220 - 240 Volt)*	HPS1103/3 HPS1012/3
11	Switch Guard	HPS1086
12	Power Cord	Ref. Only

To order parts, contact your Winston representative or call the International office:

Winston Products Co.
(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON SHORTENING FILTER
Parts Identification

Photo Reference Number	Part Description	Order Number
13	Motor Pump Cover	HPS1541
14	Power Cord Bracket	HPS1391
15	Pump Assembly	HPS1097
16	Power Switch	HPS1529
17	Motor	HPS1099
18	Pump Line Intake	HPS1741
19	Pump Line Output	HPS1740

NOTE: See pages 1 - 3 for Photo Reference

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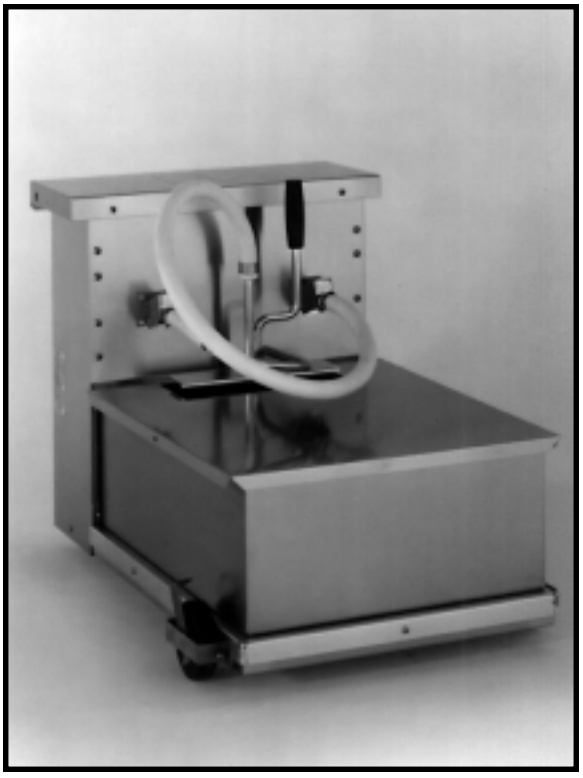
Winston Products International, Ltd.
Shortening Filter

International Parts Identification Manual



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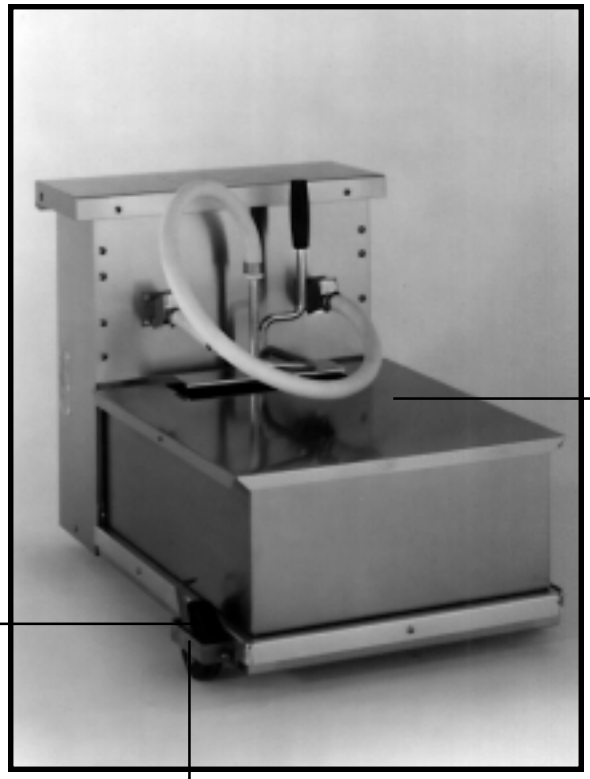
WINSTON SHORTENING FILTER

Parts Identification

NOTE: See pages 4 - 5 for Parts Descriptions and Order Numbers



Winston Products International, Ltd.

WINSTON SHORTENING FILTER

Parts Identification

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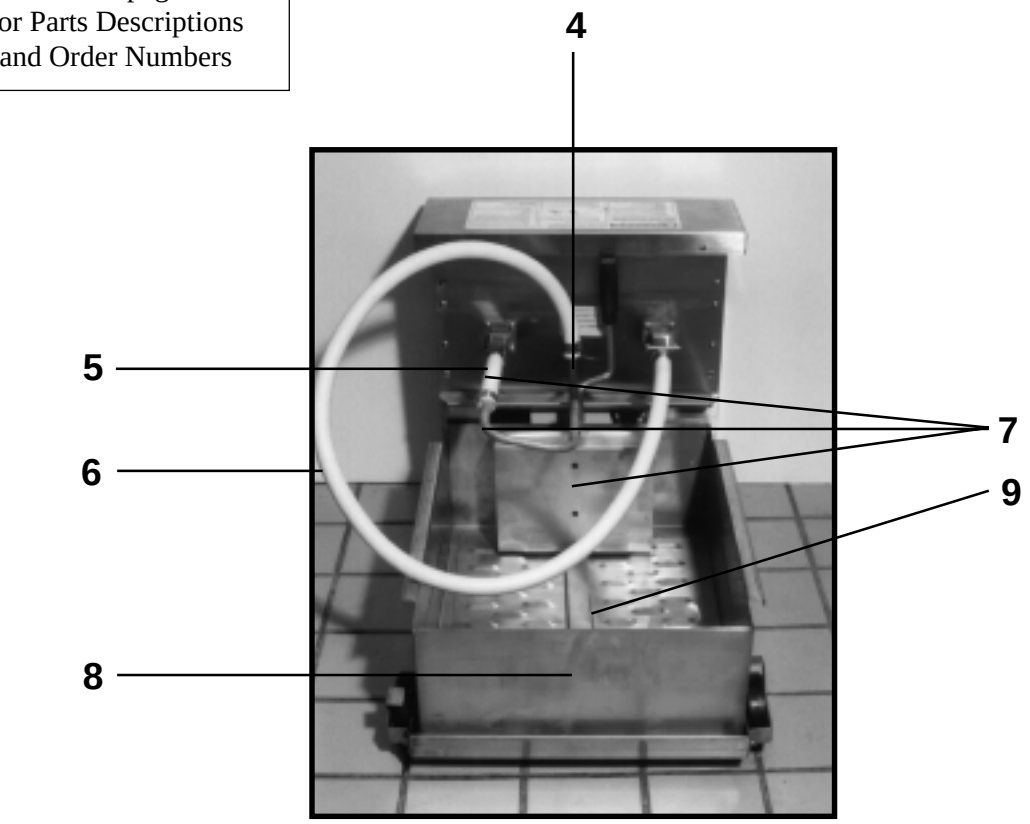

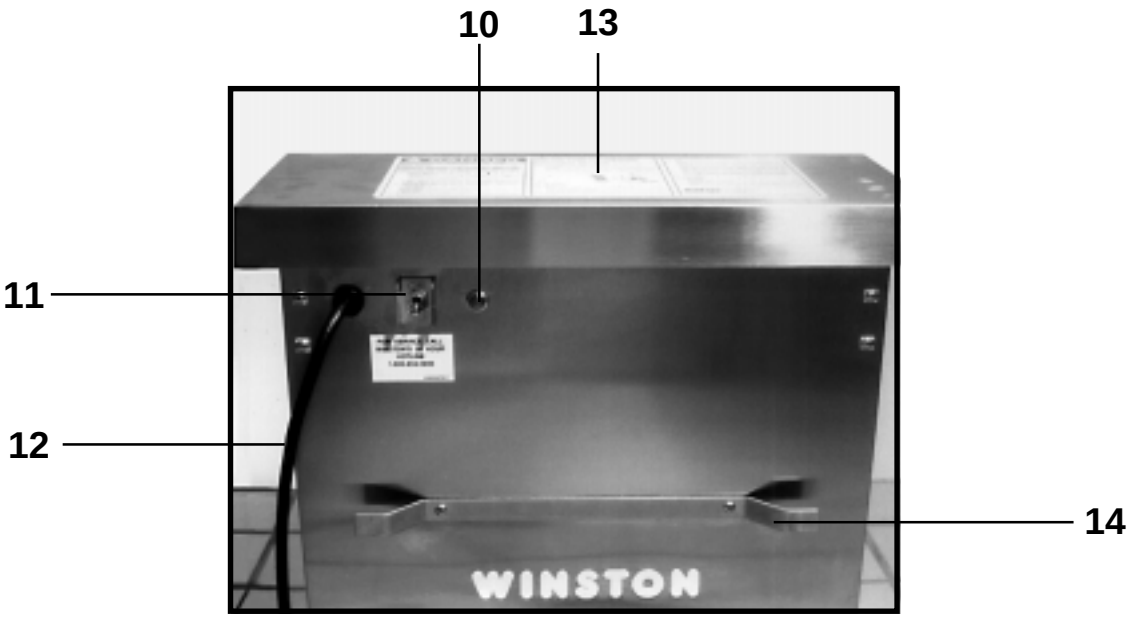

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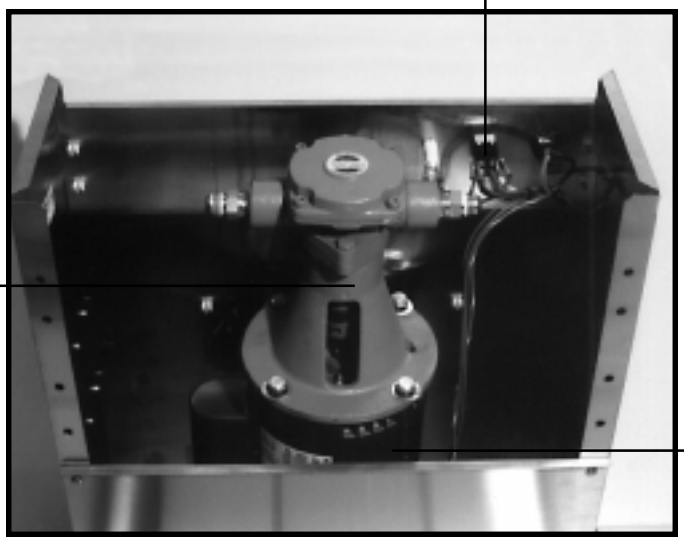
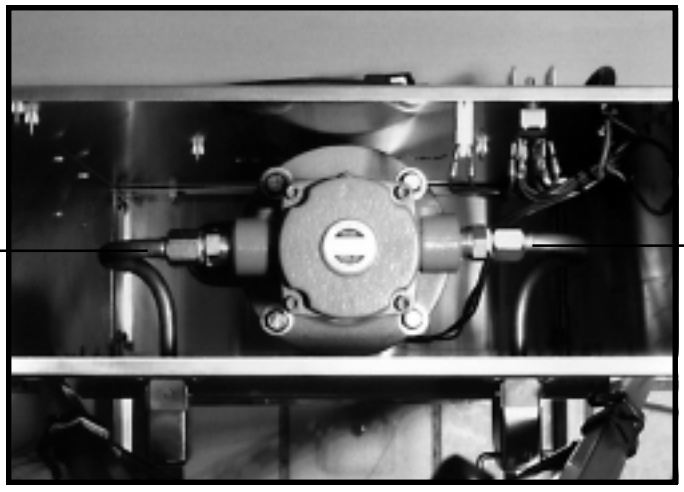
WINSTON SHORTENING FILTER

Parts Identification

NOTE: See pages 4 - 5 for Parts Descriptions and Order Numbers





WINSTON SHORTENING FILTER
Parts Identification

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	Caster Assembly (option - not shown for F662 model)	HPS2232/2
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4	Hose/Wand Assembly	HPS1558
5	Filter Hose *(7.5")*	HPS1540
6	Filter Hose *(60")*	HPS1539
7	Filter Tube/Clamp Assembly	HPS1583
8	Tank	HPS1544
9	Filter Plate	HPS1562
10	Power On Lamp *(120 Volt)* Power On Lamp *(220 - 240 Volt)*	HPS1103/3 HPS1012/3
11	Switch Guard	HPS1086
12	Power Cord	Ref. Only

WINSTON SHORTENING FILTER
Parts Identification

Photo Reference Number	Part Description	Order Number
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14	Power Cord Bracket	HPS1391
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16	Power Switch	HPS1529
17	Motor	HPS1099
18	Pump Line Intake	HPS1741
19	Pump Line Output	HPS1740

NOTE: See pages 1 - 3 for Photo Reference

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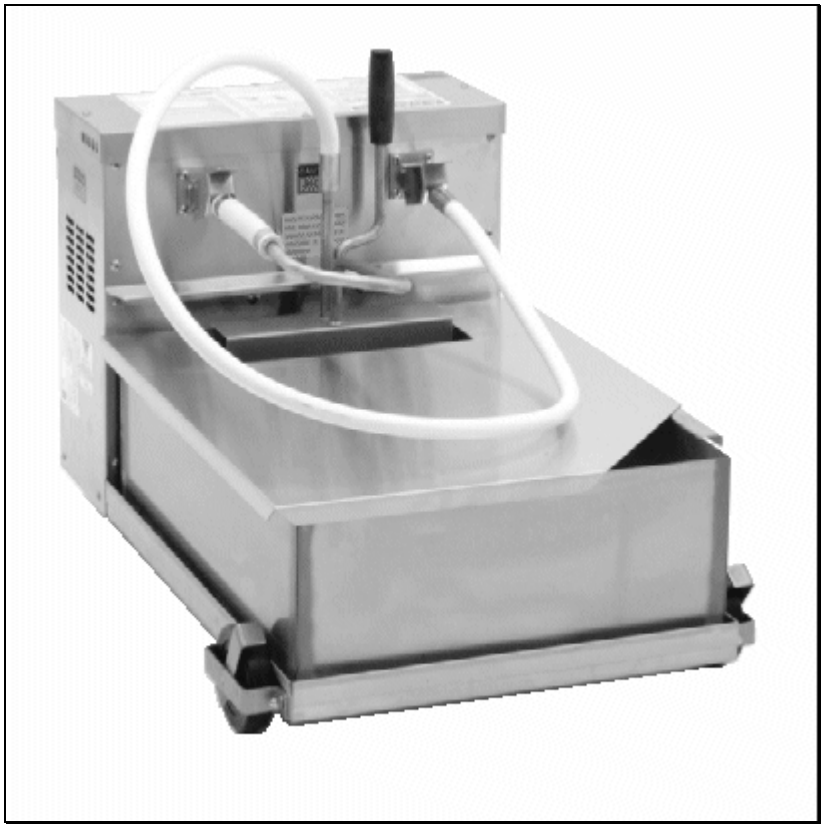
F662A
Shortening Filter

Parts Identification Manual



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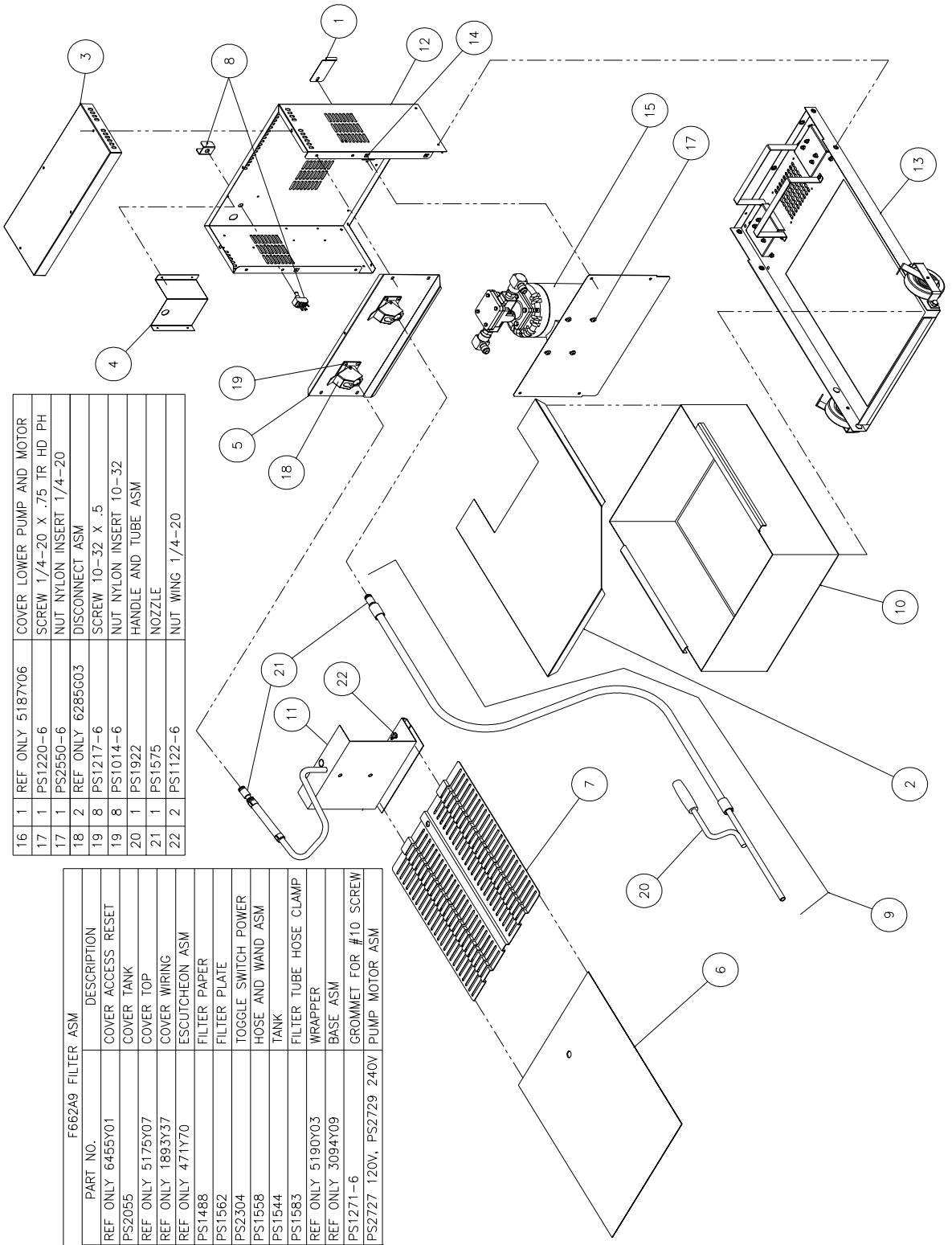
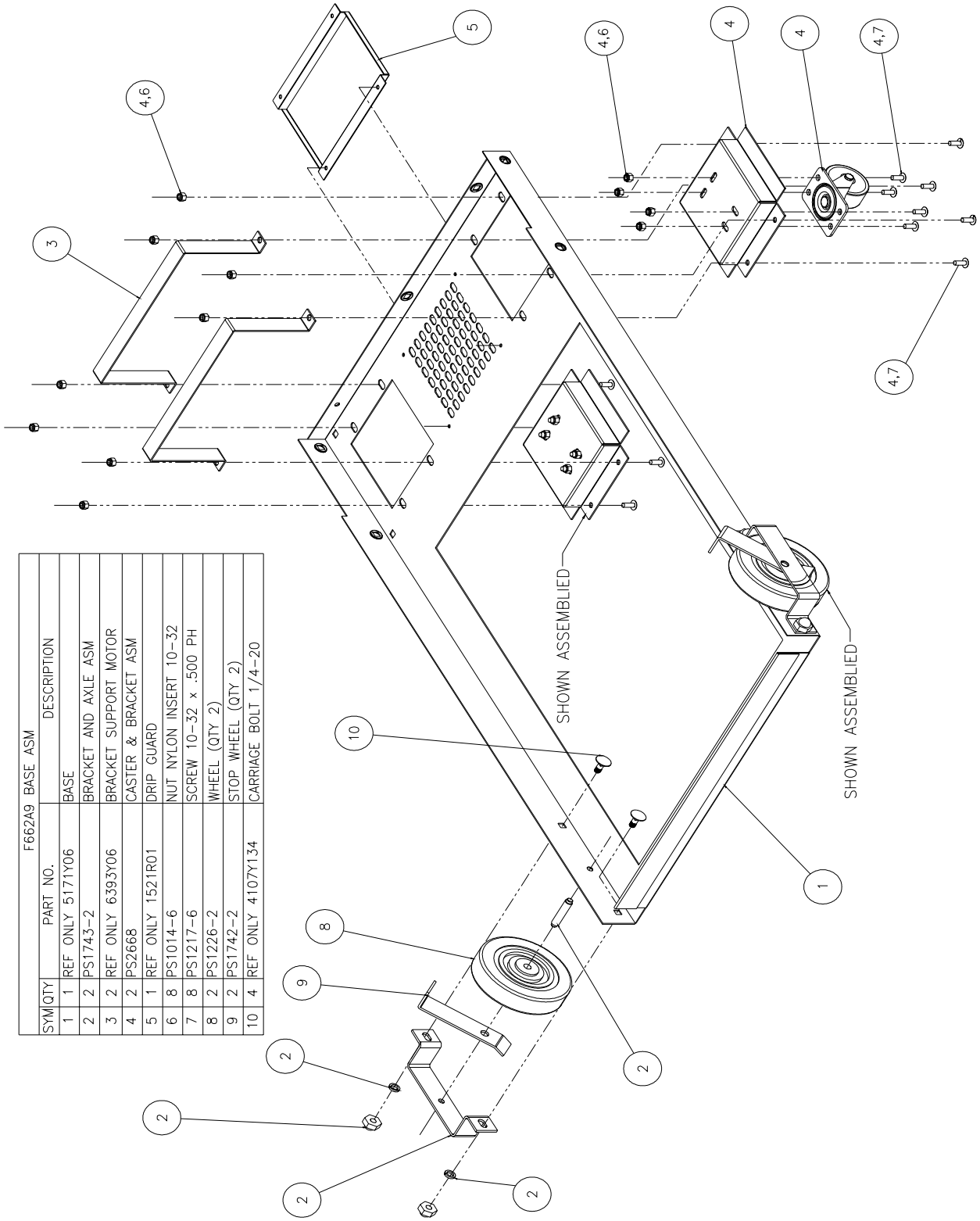
WINSTON CVAP MODEL F552 & F662 SHORTENING FILTER



F662A9 FILTER ASM

SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY 6455Y01	COVER ACCESS RESET
2	1	PS2055	COVER TANK
3	1	REF ONLY 5175Y07	COVER TOP
4	1	REF ONLY 1893Y37	COVER WIRING
5	1	REF ONLY 471Y70	ESCUTCHEON ASM
6	1	PS1488	FILTER PAPER
7	1	PS1562	FILTER PLATE
8	1	PS2304	TOGGLE SWITCH POWER
9	1	PS1558	HOSE AND WAND ASM
10	1	PS1544	TANK
11	1	PS1583	FILTER TUBE HOSE CLAMP
12	1	REF ONLY 5190Y03	WRAPPER
13	1	REF ONLY 3094Y09	BASE ASM
14	3	PS1271-6	GROMMET FOR #10 SCREW
15	1	PS2727 120V, PS2729 240V	PUMP MOTOR ASM
16	1	REF ONLY 5187Y06	COVER LOWER PUMP AND MOTOR
17	1	PS1220-6	SCREW 1/4-20 X .75 TR HD PH
17	1	PS2550-6	NUT NYLON INSERT 1/4-20
18	2	REF ONLY 6285G03	DISCONNECT ASM
19	8	PS1217-6	SCREW 10-32 X .5
19	8	PS1014-6	NUT NYLON INSERT 10-32
20	1	PS1922	HANDLE AND TUBE ASM
21	1	PS1575	NOZZLE
22	2	PS1122-6	NUT WING 1/4-20

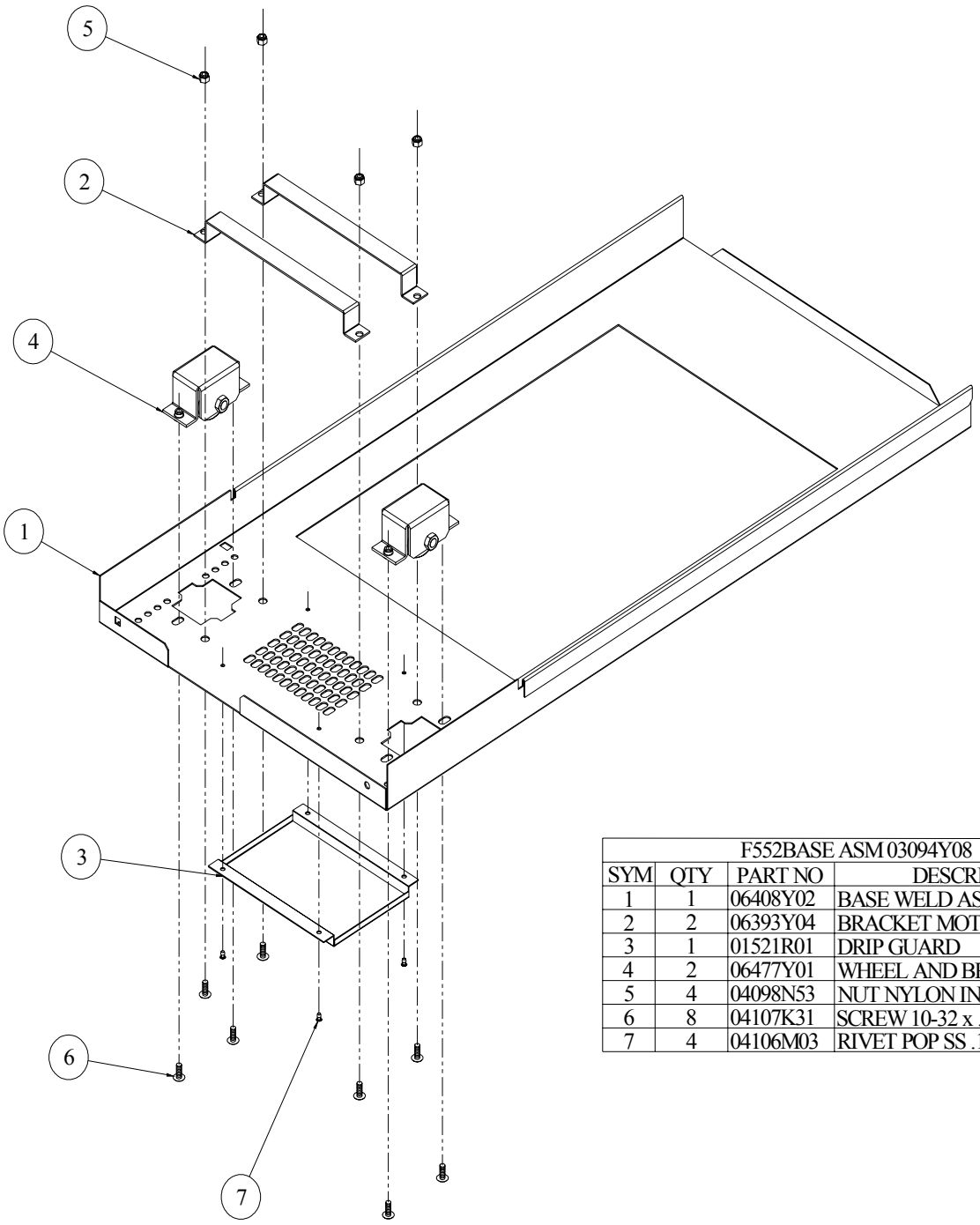
WINSTON CVAP MODEL F552 & F662 SHORTENING FILTER



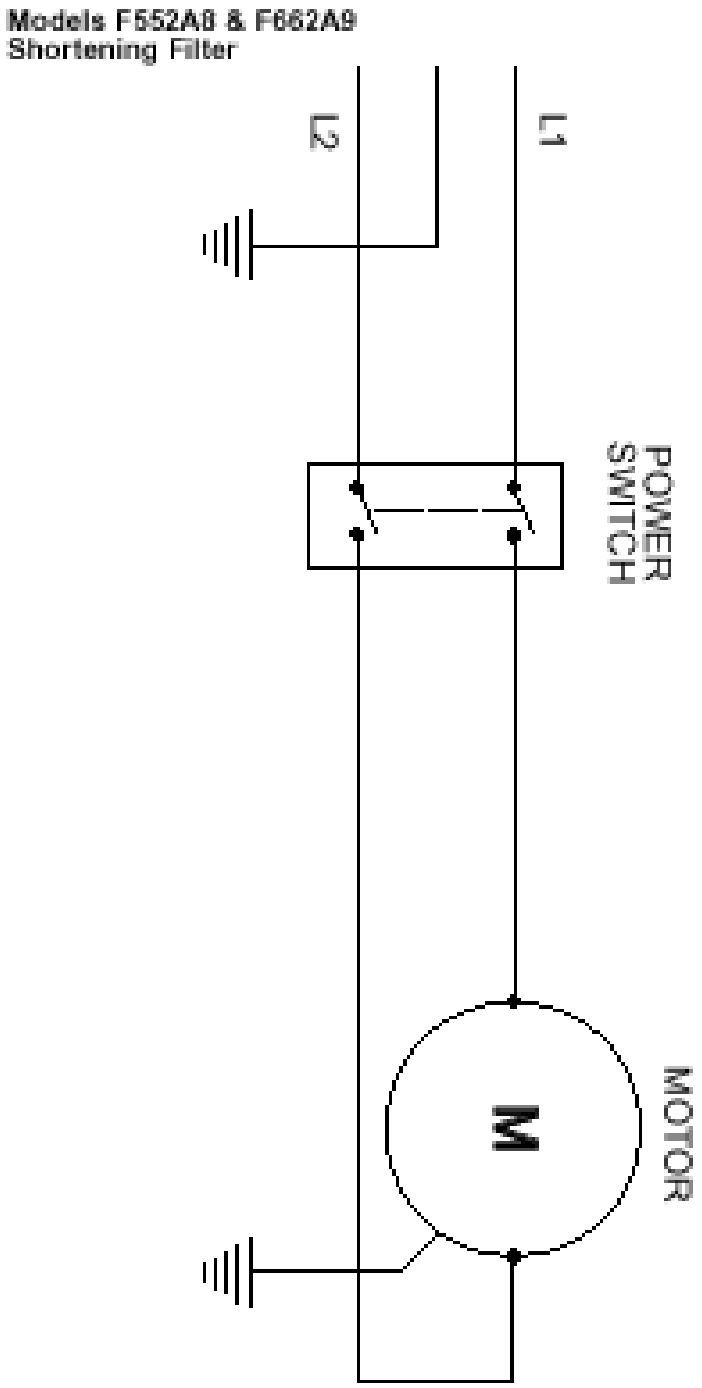
F662A9 BASE ASM

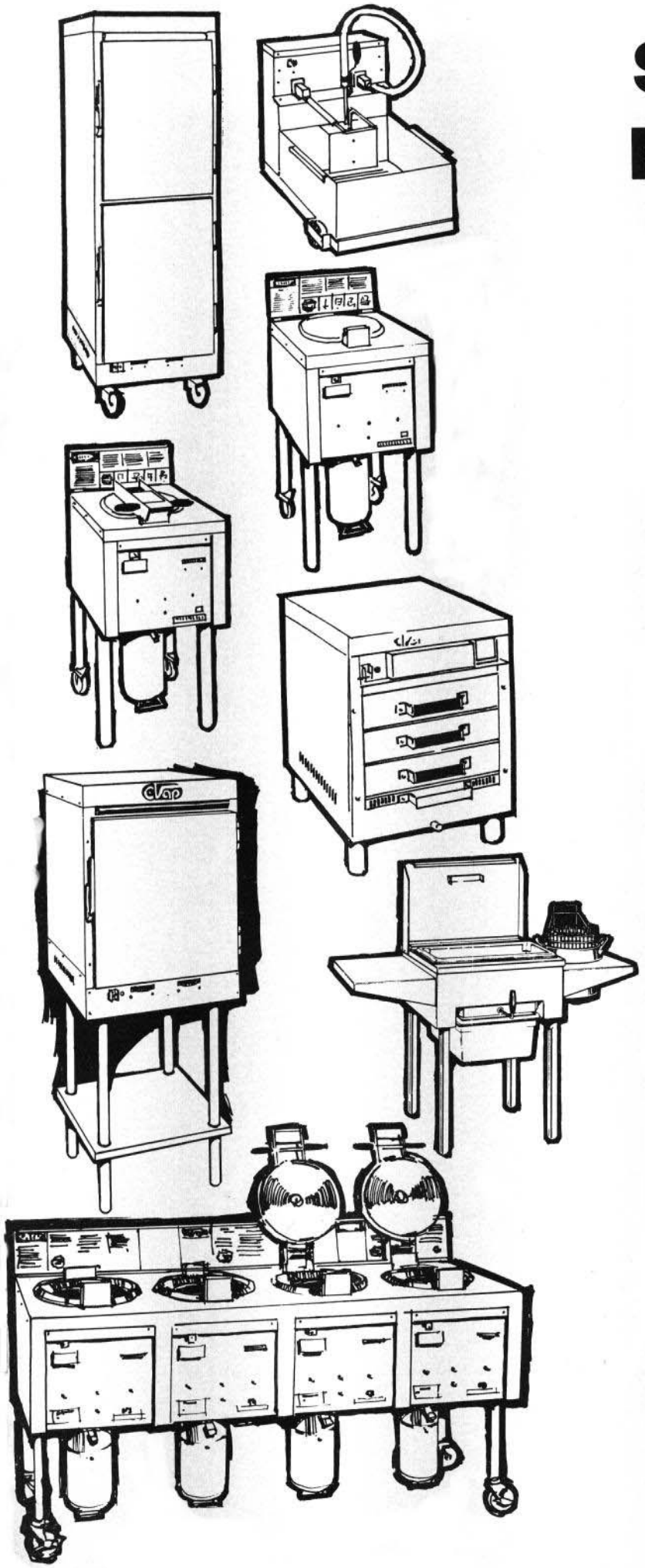
SYM	QTY	PART NO.	DESCRIPTION
1	1	REF ONLY 5171Y06	BASE
2	2	PS1743-2	BRACKET AND AXLE ASM
3	2	REF ONLY 6393Y06	BRACKET SUPPORT MOTOR
4	2	PS2668	CASTER & BRACKET ASM
5	1	REF ONLY 1521R01	DRIP GUARD
6	8	PS1014-6	NUT NYLON INSERT 10-32
7	8	PS1217-6	SCREW 10-32 x .500 PH
8	2	PS1226-2	WHEEL (QTY 2)
9	2	PS1742-2	STOP WHEEL (QTY 2)
10	4	REF ONLY 4107Y134	CARRIAGE BOLT 1/4-20

WINSTON CVAP MODEL F552 & F662 SHORTENING FILTER



F552BASE ASM 03094Y08			
SYM	QTY	PART NO	DESCRIPTION
1	1	06408Y02	BASE WELD ASM
2	2	06393Y04	BRACKET MOTOR
3	1	01521R01	DRIP GUARD
4	2	06477Y01	WHEEL AND BRACKET ASM
5	4	04098N53	NUT NYLON INSERT 10-32
6	8	04107K31	SCREW 10-32 x .50 TR HD PH
7	4	04106M03	RIVET POP SS .125 x .125


Models F552A8 & F662A9
Shortening Filter
L2
L1
POWER SWITCH
M
MOTOR



SERVICE MANUAL

SHORTENING FILTER

MODEL 302A02E20

MANUAL REORDER: LIT 8650/REV.0/7-85

WINSTON

PRODUCTS COMPANY

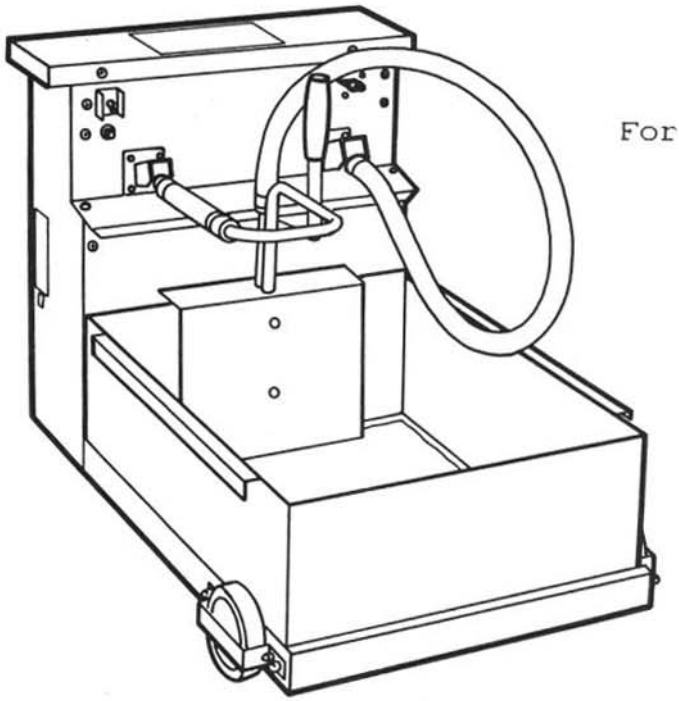
LIT 8550/REV. 0/8-84
* SEE FIRST PAGE FOR MANUAL REORDER NUMBER

SERVICE MANUAL

SHORTENING FILTER

MODEL 302A02E20

MANUAL REORDER: LIT 8650/REV. 0/7-85



For filtering and polishing shortening.

DANGER XXX

Service of this equipment causes one to encounter **ELECTRICAL AND HIGH TEMPERATURE HAZARDS** capable of producing property damage or inflicting serious injury or death. Any person attempting diagnosis and repair involving removal of panels and/or exposure to live electrical terminals must be trained or experienced in such service procedures.

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NOTE:
Diagnosis of complaints relative to the performance of the equipment reveals the following to be the usual sources (arranged from most to least frequent):

- FAULTY USE AND CARE PRACTICES
- ELECTRICAL SUPPLY PROBLEMS
- EQUIPMENT FAULTS

Check the above in order before assuming that the equipment is faulty. If, after checking the first two (2) items the problem still exists, proceed with diagnosis and repair of equipment faults. If the filter is 'IN WARRANTY', contact the manufacturer relative to servicing the equipment.

PARTS IDENTIFICATION

REF. NO.	PART DESCRIPTION-FUNCTION	KIT ORDER NO.	KIT CONTENT QTY	KIT CONTENT PART DESC.
1	FLIP - TOP TRAY ASSEMBLY * Work surface/storage tray. Flip up when using filter.	1060G04K	1	tray asm.
			2	arm asm.
			2	chain/hook
			2	nut/wshr/scr
			1	drain extend
2	THERMOSTAT KNOB Used to set desired shortening melt or hold temperature.	2008P23K	1	knob
3	DISCONNECT WELD ASSEMBLY (PUMP OUT) Connector between pump and hose/wand assembly. Safety cover prevents accidental disconnection of hose from weld assembly.	6291G03K	1	weld asm L
			1	nut
			1	cover
			1	pin
4	FILTER HOSE 48 INCH Flexible neoprene hose. Part of hose and wand assembly.	6039P02K	1	hose
			1	clamp
5	FILTER AID DISPENSER * Measures and disperses filter aid material.	6405G02K	1	dispenser
			1	mount brkt
			2	acorn nut
6	FILTER PAPER Filters cracklings, free fatty acids and other solids from shortening.	930G02K	100	filter paper
7	STRAINER (PREFILTER) * Collects large solid particles to prevent premature clogging of filter paper.	6198P01K	1	strainer
8	HOSE AND WAND ASSEMBLY Directs filtered shortening to fryer or back through filter.	6262G05K	1	handle/tube
			1	nozzle
			1	hose
			1	O-ring
			1	clamp
9	POWER SWITCH Controls electrical current to pump motor only. Power lamp and heater are not controlled by power switch.	010P41K	1	switch

* Optional accessory.

PARTS IDENTIFICATION

REF. NO.	PART DESCRIPTION-FUNCTION	KIT ORDER NO.	KIT CONTENT QTY	KIT CONTENT PART DESC.
10	POWER LAMP When ON, indicates power is applied to filter (i.e., it is plugged in). Lamp is not controlled by power switch.	601G52K	1	lamp
11	DISCONNECT WELD ASSEMBLY (PUMP IN) Connector between pump and filter tube and clamp assembly. Safety cover prevents accidental disconnection of hose from weld assembly.	6291G08K	1 1 1 1	weld asm R nut cover pin
12	FILTER HOSE 7.5 INCH Flexible neoprene hose. Connects filter tube and clamp assembly to disconnect weld assembly (pump in).	6039P08K	1 1	hose clamp
13	FILTER TUBE AND CLAMP ASSEMBLY Transfers shortening from filter plate assembly to pump inlet disconnect weld assembly. Supports filter aid dispenser.	6292G08K	1 1 2	tube asm clamp asm wing nut
14	FILTER PLATE ASSEMBLY Supports filter paper and directs flow of shortening to filter tube and clamp assembly.	6289G01K	1	assembly
15	TANK 60LB Holds 60 lbs of shortening.	6173P04K	1	tank
16	FRONT WHEEL ASSEMBLY Enables movement of filter.	6408G04K	2 2 2 8 2 2	4" wheel bolt nut acorn nut spacer bracket
17	MOTOR SUPPORT Supports motor and pump assemblies.	6158P03K	1	support
18	PUMP OUT CONNECTOR Directs flow of shortening out of pump. Connects disconnect weld assembly (pump out) to pump.	ref. only		

PARTS IDENTIFICATION

REF. NO.	PART DESCRIPTION-FUNCTION	KIT ORDER NO.	KIT CONTENT QTY	KIT CONTENT PART DESC.
19	SHAFT SEAL ASSEMBLY Seals pump housing and prevents shortening from running down pump shaft to motor.	1003G23K	1 1 1 1	mating ring seal ring spring spring seat
20	THERMOSTAT Controls shortening melting and holding temperatures.	601G35K	1	thermostat
21	MOTOR ASSEMBLY Drives pump.	6263G08K	1 1	motor mtr wire asm
22	PUMP COVER Encases pump rotor and rollers.	ref. only		
23	CORDSET Connects electric components of filter to convenience power outlet.	6215G05K	1	cordset
24	ROLLERS Work in conjunction with rotor to create suction for moving shortening through pump.	1001P12K	5	rollers
25	PUMP IN CONNECTOR Directs flow of shortening into pump. Connects disconnect weld assembly (pump in) to pump.	ref. only		
26	PUMP Forces shortening through filtering system.	601G33K	1	pump
17	WIRING ASSEMBLY Supplies electrical current to all major components.	2293G03K	1	assembly
18	HEATER COVER KIT Protects heaters, insulation, and thermostat bulb.	6333P02K	1 1 1 1	cover top insul. guard T bulb hold. cover btm.
19	ESCUTCHEON Service/control panel.	6411G05K	1 2	escutcheon nutsert

PARTS IDENTIFICATION

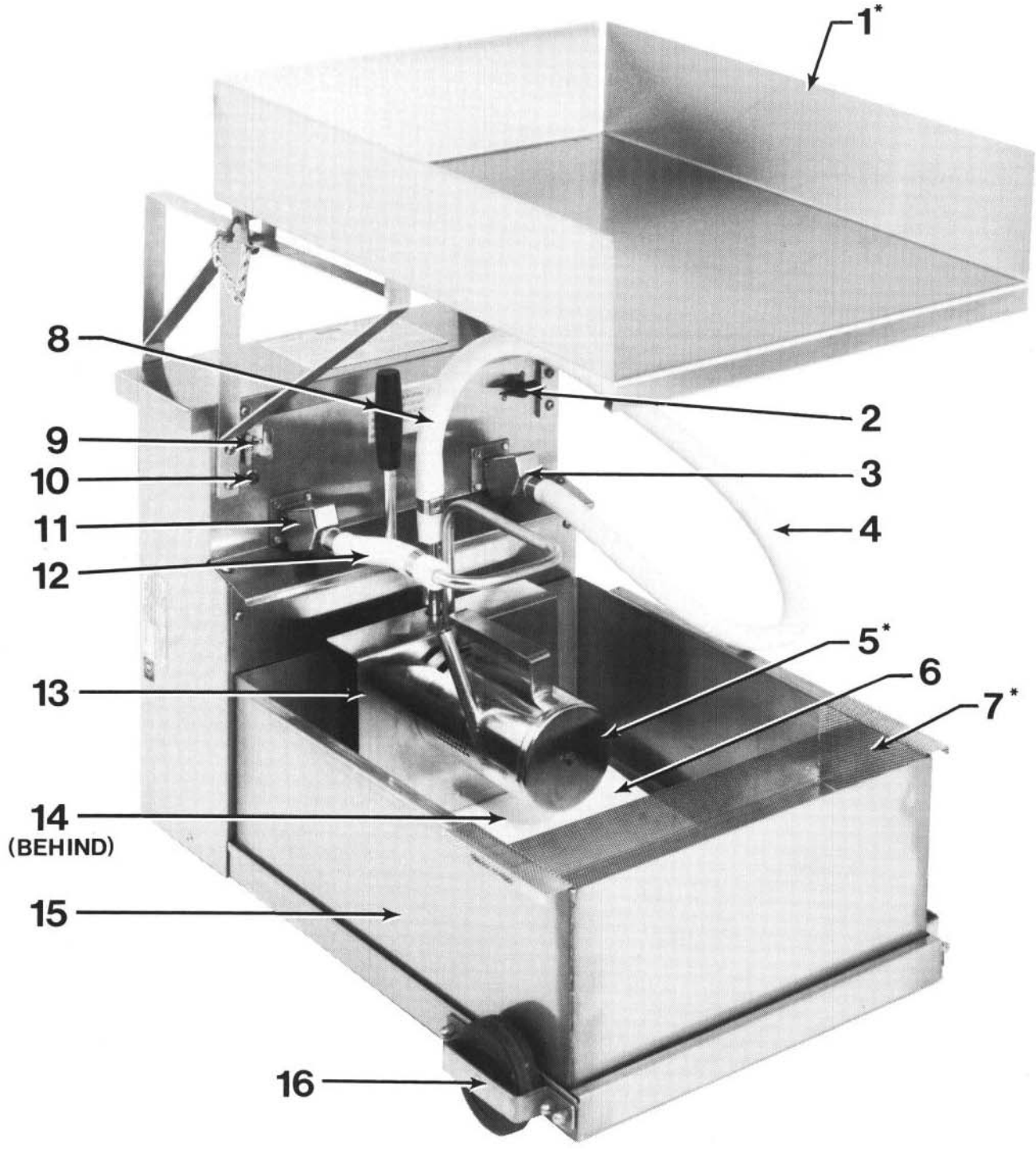
REF. NO.	PART DESCRIPTION- FUNCTION	KIT ORDER NO.	KIT CONTENT QTY	KIT CONTENT PART DESC.
30	REAR WHEEL ASSEMBLY Enables movement of filter.	1001P96K	2 2 2	4" wheel bolt nut
31	THERMOSTAT BULB Temperature sensor. (part of heater thermostat).	ref. only		
32	THERMOSTAT BULB HOLDER Prevents thermostat bulb from touching heater. (part of heater cover kit).	ref. only		
33	COVER AND NUT ASSEMBLY - BOTTOM Forms bottom layer of heater cover assembly. Protects insulation.	ref. only		
34	INSULATION Prevents heat loss through bottom of filter.	6111P02K	1	insulation
35	HEATER ASSEMBLY Provides heat for melting and holding shortening.	6171P05K	1 2 2	heater washer nut
36	INSULATION GUARD ASSEMBLY Protects insulation from heaters.	ref. only		

TROUBLESHOOTING

DANGER: ELECTRICAL AND HIGH TEMPERATURE HAZARDS MAY BE ENCOUNTERED DURING EQUIPMENT SERVICING.

SYMPTOMS	FAULTS
Pump fails to run	1, 4, 6
Fails to pump	2, 3, 4, 7
Motor shuts off automatically	5
Heater fails to turn on	1, 11, 12
Shortening leaking around pump shaft	8
Shortening leaking at safety disconnect	9
Shortening fails to melt	1, 10, 11, 12

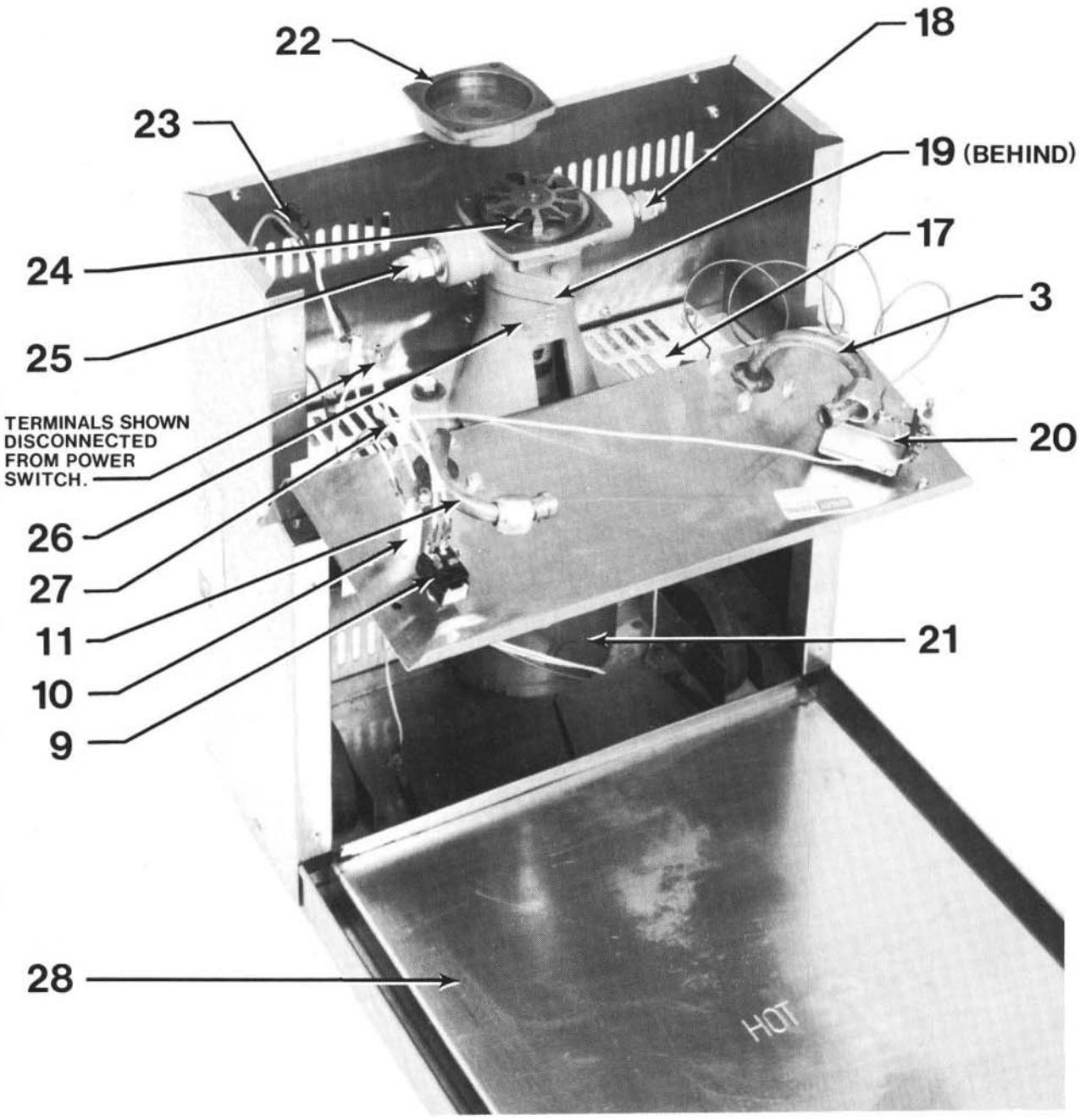
	FAULTS	REMEDIES: CLEAN	ADJUST	REPAIR	REPLACE
1.	Circuit breaker tripped		*		
	Fuse blown				*
	Corset not plugged in		*		
	Faulty power switch				*
2.	Hose or wand clogged with solid shortening	*			
3.	Pump clogged with solid shortening	*			
4.	Pump and/or motor faulty			*	*
5.	Thermal switch activated				*
6.	Frozen bearings				*
7.	Connectors loose (motor to pump)			*	*
8.	Pump shaft seal assembly worn or faulty				*
9.	O-rings worn or faulty				*
10.	Thermostat set wrong		*		
11.	Faulty thermostat				*
12.	Faulty heater				*



*OPTIONAL ACCESSORY

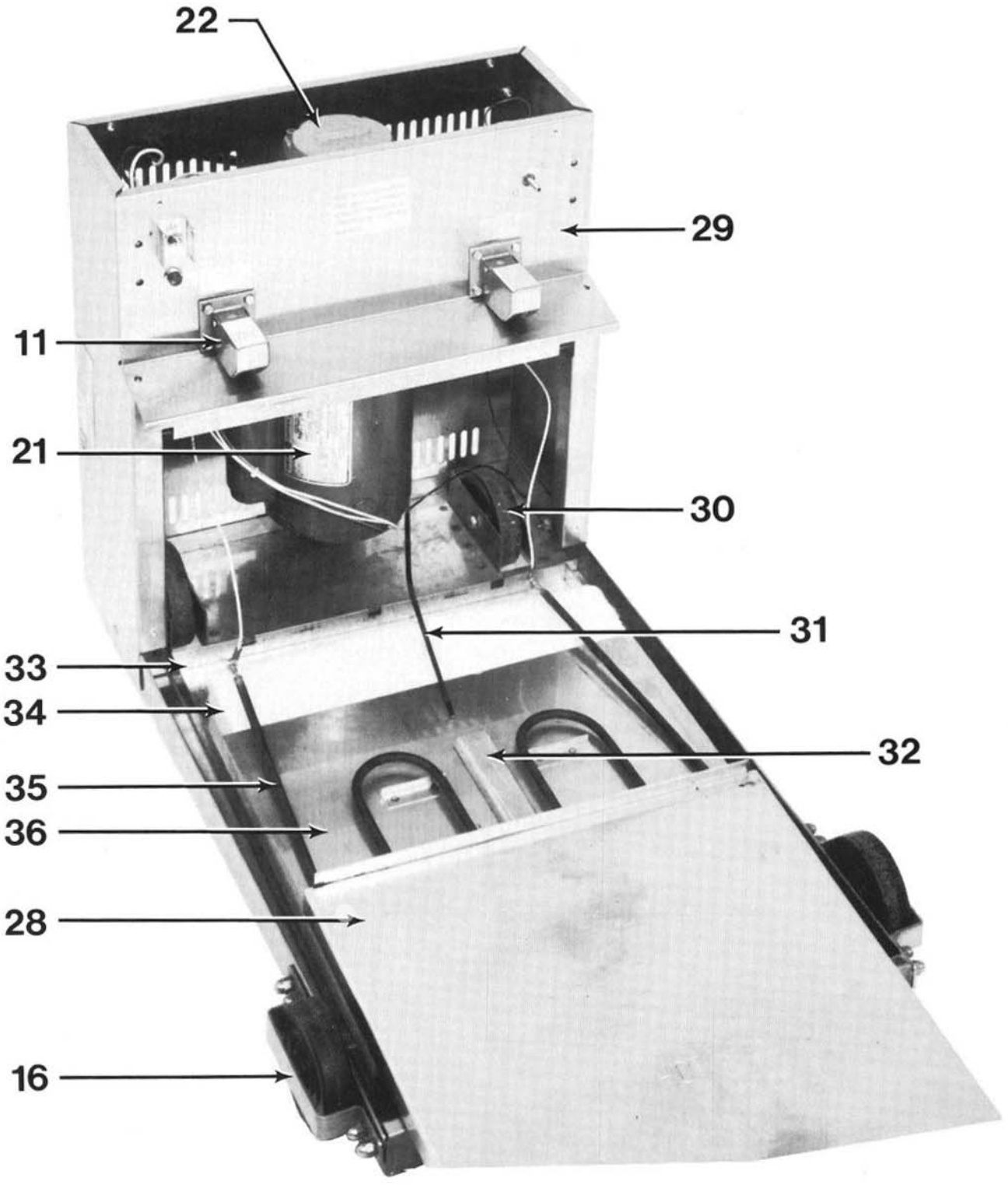
SHORTENING FILTER

COMPLETE UNIT



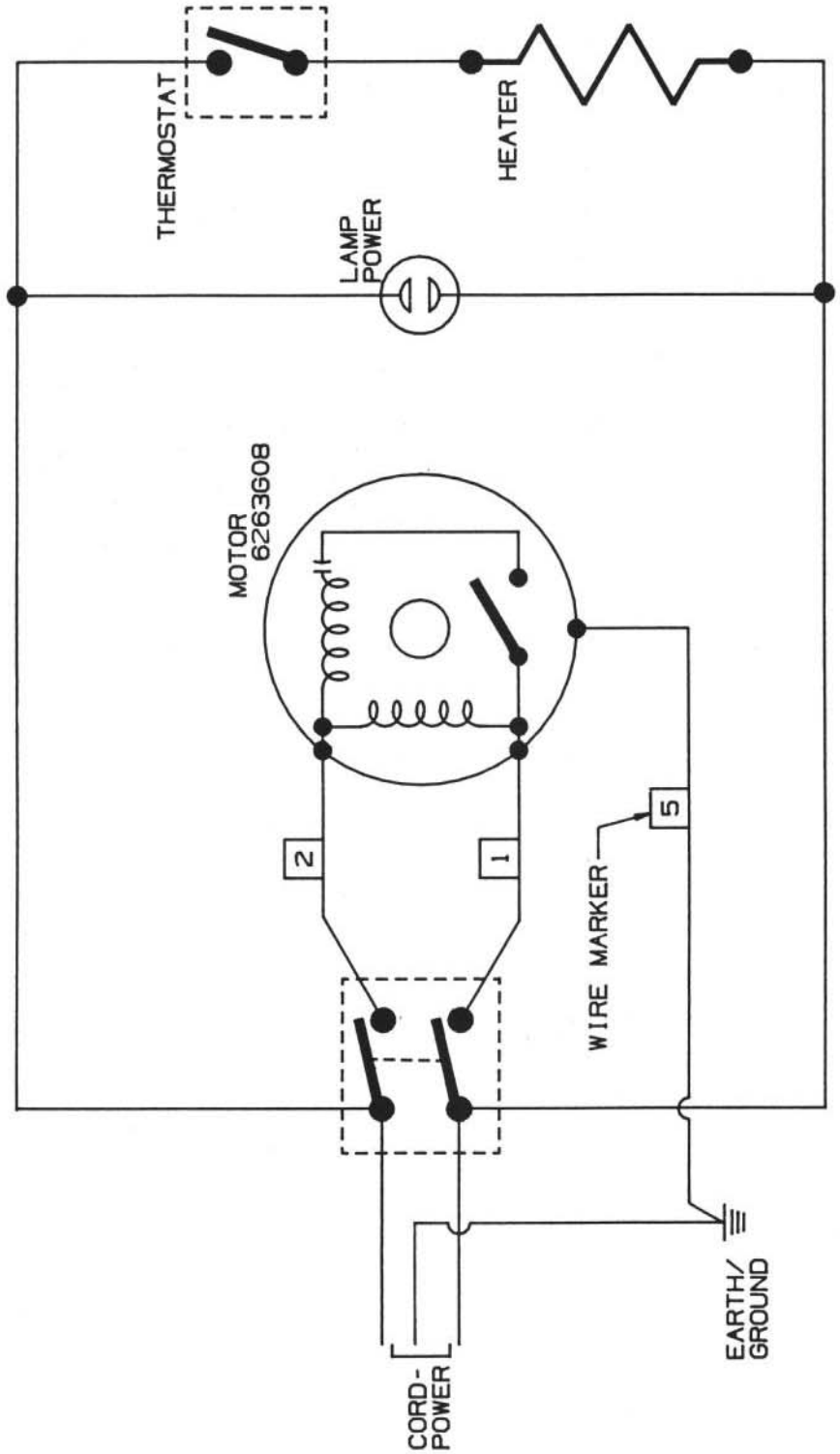
SHORTENING FILTER

PUMP AND CONTROL PANEL



SHORTENING FILTER

HEATER ASSEMBLY



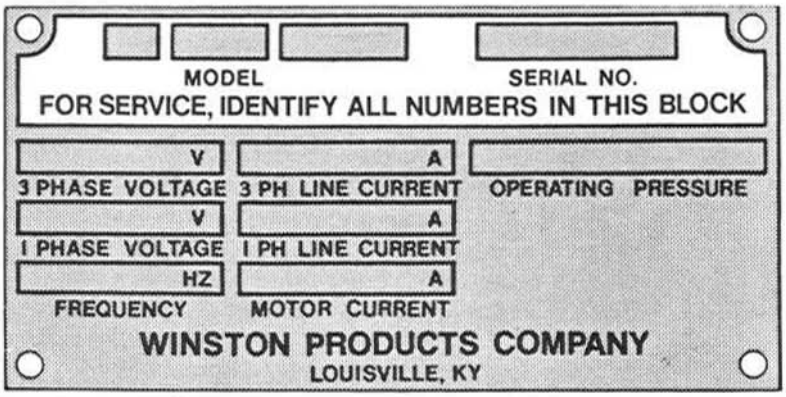
SHORTENING FILTER

CIRCUIT DIAGRAM

LIT 8659/Rev.0/7-85

PARTS ORDERING INFORMATION

ALWAYS REFER TO THE MODEL NUMBER AND SERIAL NUMBER WHEN PLACING A PARTS ORDER.



Use only genuine Winston Products replacement parts in your appliance. Refer to the parts identification section of this manual to identify the part(s) needed.

PROCEDURES FOR REPLACING NEW COMPONENTS ARE INCLUDED IN EACH COMPONENT REPAIR KIT. FOLLOW THOSE INSTRUCTIONS CAREFULLY.

To order parts or obtain other information, contact:

WINSTON PRODUCTS COMPANY
2345 Carton Drive
Louisville, Kentucky 40299
(502) 491-1810

Customer Service (800) 626-5524

TERMS AND CONDITIONS OF SERVICE PARTS PURCHASE

Purchaser of service parts for all equipment manufactured by Manufacturer ("Equipment"), whether for use or resale, agrees to take all steps reasonably available to purchaser to:

- assure operation of Equipment in accordance with Manufacturer's 'Safety First' Use and Care Instructions and warnings delivered with Equipment and any instructions or warnings later issued by Manufacturer and delivered to Purchaser (collectively "Safety Instructions");
- adequately train and supervise all personnel who will operate or maintain Equipment ("Operators") as to the Safety Instructions.
- have Safety Instructions available to operators at all times in the most current form provided by Manufacturer;
- affix to equipment all labels and warning provided by Manufacturer for such purposes; and
- maintain Equipment in fault free condition.

Purchaser agrees to defend, hold harmless, and indemnify Manufacturer from any loss or claim, including all attorney fees and costs of defense, arising out of Purchaser's failure to fulfill any of the foregoing obligations. Purchaser agrees that terms and conditions included in the purchase of any service parts for Equipment shall apply, from such date of purchase, to all Equipment on which the service part may be used.

Winston Products Company 2345 Carton Drive, Louisville, KY 40299, (502)491-1810

Lit 8661/Rev. 0/5-85

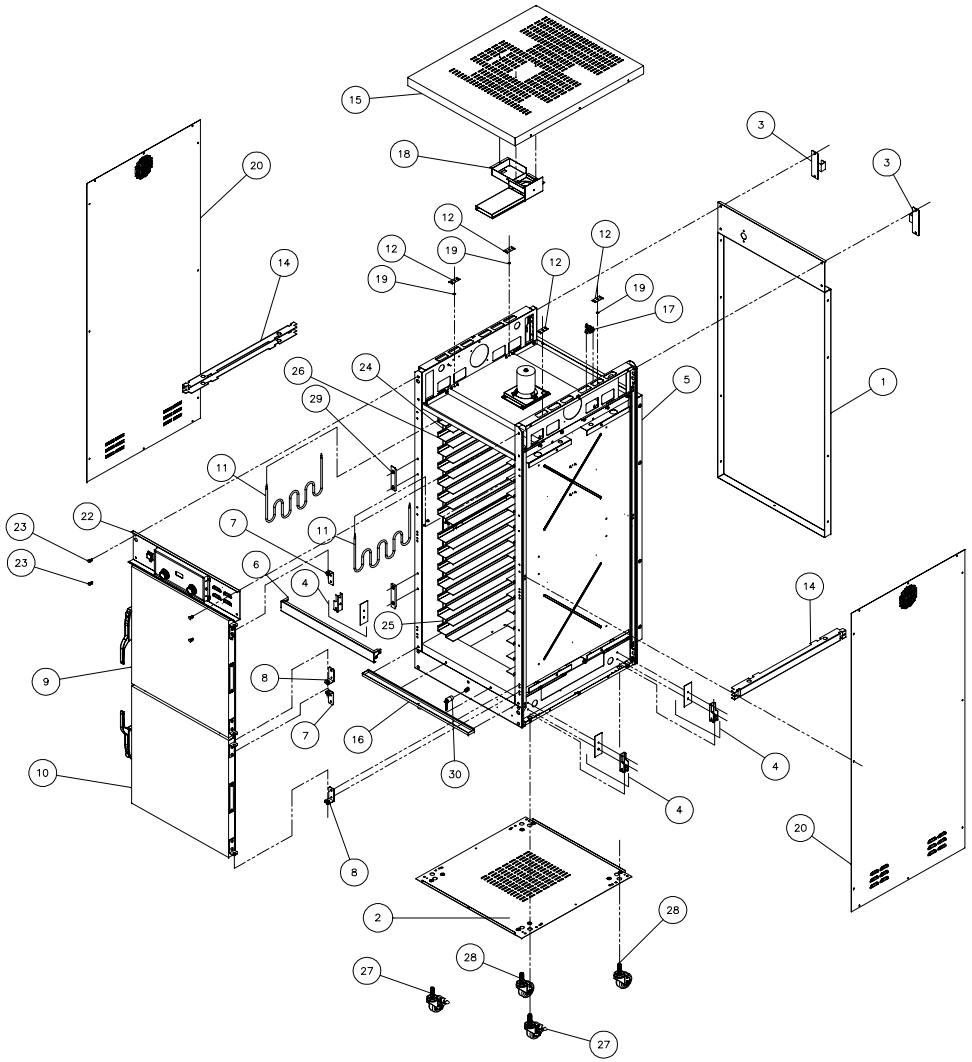
HA4522
Holding Cabinet

Parts Identification Manual

HA4522-HR-3

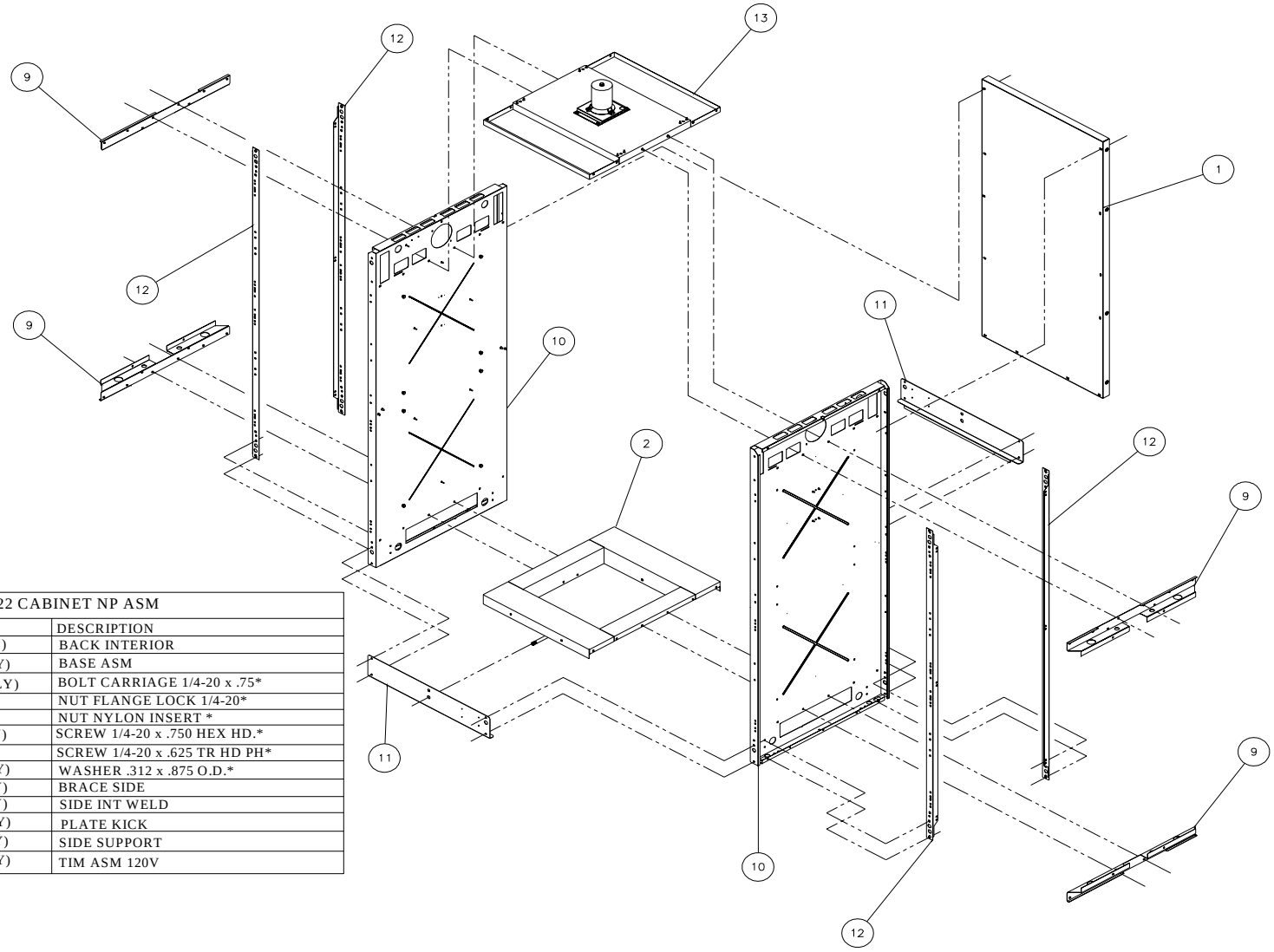
Winston Industries, LLC - 2345 Carton Dr. - Louisville - Kentucky - 40299
www.cvap.com 1-800-234-5286 502-495-5400 FAX 502-495-5458 www.winstonindustries.com

WINSTON CVAP MODEL HA4522 Holding Cabinet



HA4522 MAIN ASM			
SYM	QTY	PART NO.	DESCRIPTION
1	1	00023N02 (REF ONLY)	BACK EXTERIOR
2	1	00029L01(REF ONLY)	BOTTOM
3	2	01062N01 (REF ONLY)	BRACKET CORD WELD
4	4	PS2421-4	BRACKER LEG WELD
5	1	02333N12 (REF ONLY)	CAP NP ASM
6	1	00254M02 (REF ONLY)	DIVIDER DOOR
7	2	PS2116 (STD) or PS2703 (Self-Close)	HINGE CABINET TOP
8	2	PS2116	HINGE CABINET BOTTOM
9	1	03112M24 (REF ONLY)	DOOR ASM TOP
10	1	03112M25 (REF ONLY)	DOOR ASM BOTTOM
11	2	PS2067	HEATER AIR
12	4	00204M01 (REF ONLY)	RETAINER O-RING HEATER
13	4	5577U01 (included w/ PS2421-4)	PLATE REINFORCEMENT LEG BRACKET
14	2	PS2154	SUPPORT SIDE INT HOR
15	1	00248R12 (REF ONLY)	TOP EXTERIOR
16	1	PS2789 (PT), PS2790 (NPT)	TROUGH WELD
17	1	PS2199	THERMOSTAT 250
18	1	06255R27 (REF ONLY)	DUCT AIR ASM
19	4	PS1784-3	O-RING
20	2	00037V10 (REF ONLY)	SIDE EXTERIOR
21	37	PS1271-6	GROMMET SCREW #10
22	1	02332R43 (REF ONLY)	ESC/CTRL ASM 120V
23	8	4107V119 (REF ONLY)	BOLT CARRIAGE 1/4-20 x .75
24	2	00209R21 (REF ONLY)	FLUE TOP
25	2	00209R22 (REF ONLY)	FLUE BOTTOM
26	28	PS2305	CHANNEL REMOVEABLE
27	2	PS2146	CASTER SWIVEL LOCK 3 T-STEM
28	2	PS2540-4	CASTER SWIVEL NONLOCK 3 T-STEM
29	2	See Drawing...	SUPPLIED WITH DOOR LATCH
30	1	PS1654	DRAIN CAP ASM

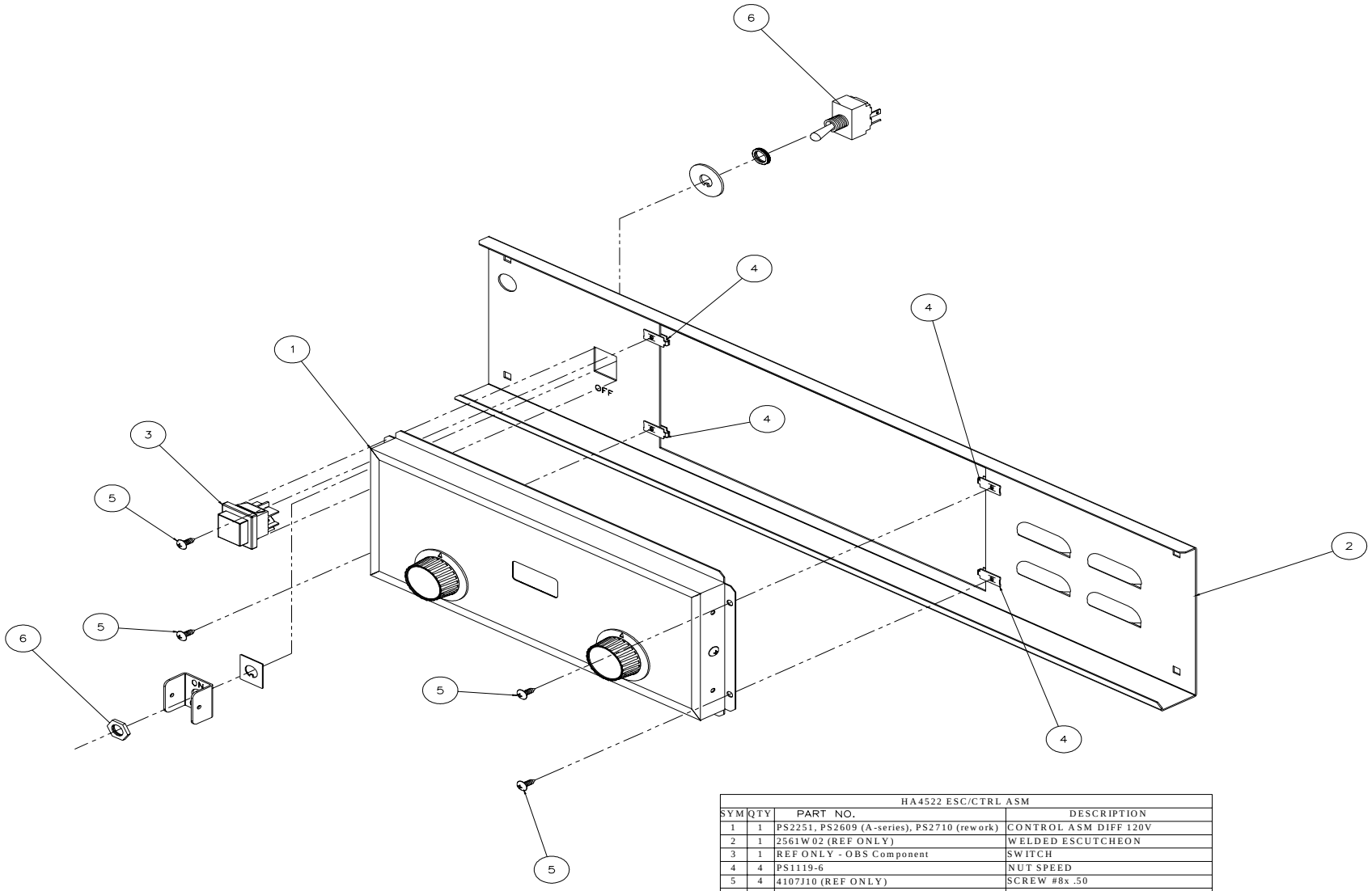
WINSTON CVAP MODEL HA4522 Holding Cabinet



HA4522 CABINET NP ASM			
SYM	QTY	PART NO.	DESCRIPTION
1	1	00021L01 (REF ONLY)	BACK INTERIOR
2	1	02331T57 (REF ONLY)	BASE ASM
3	8	04107V119 (REF ONLY)	BOLT CARRIAGE 1/4-20 x .75*
4	30	PS1819-6	NUT FLANGE LOCK 1/4-20*
5	8	PS2550-6	NUT NYLON INSERT *
6	20	04107L66 (REF ONLY)	SCREW 1/4-20 x .750 HEX HD.*
7	6	PS1222-6	SCREW 1/4-20 x .625 TR HD PH*
8	8	04023W23 (REF ONLY)	WASHER .312 x .875 O.D.*
9	4	00079X08 (REF ONLY)	BRACE SIDE
10	2	00306V17 (REF ONLY)	SIDE INT WELD
11	2	00233M01 (REF ONLY)	PLATE KICK
12	4	00244V18 (REF ONLY)	SIDE SUPPORT
13	1	06255M04 (REF ONLY)	TIM ASM 120V

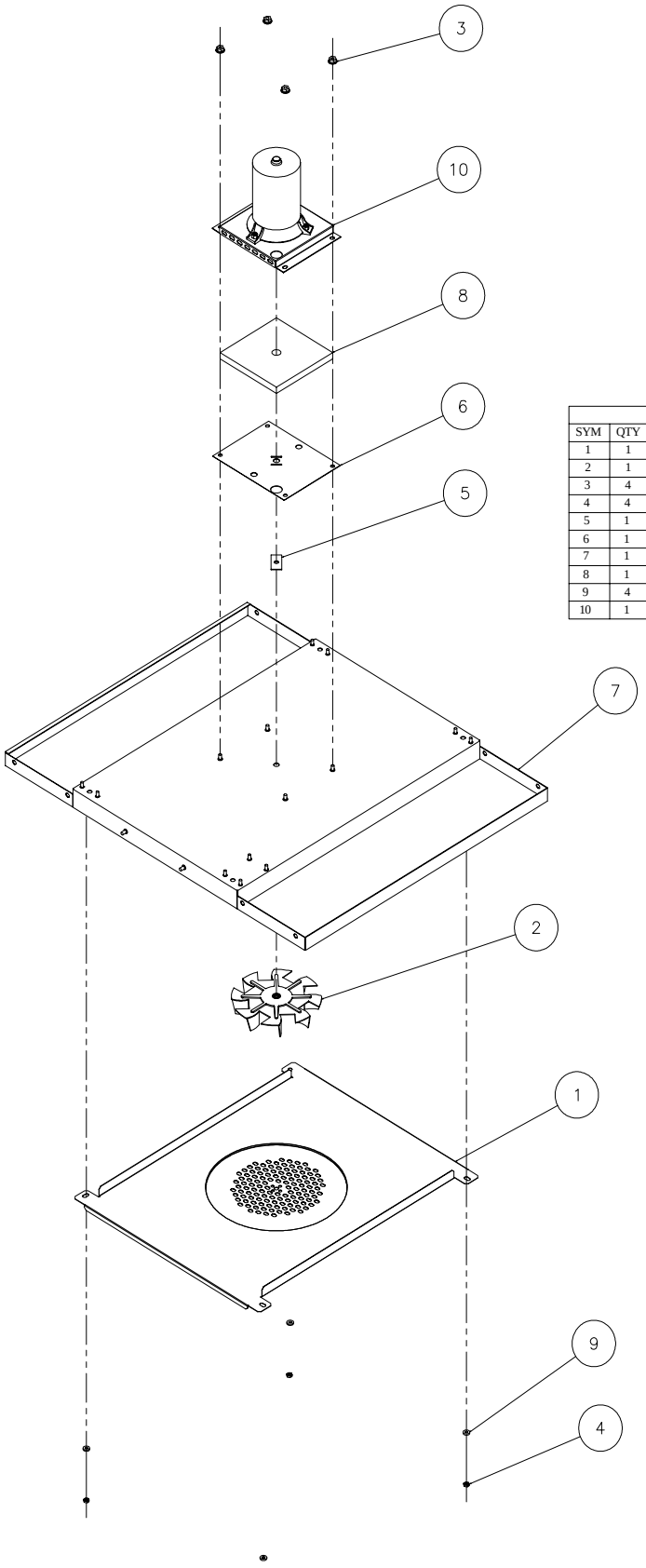
* = NOT SHOWN

WINSTON CVAP MODEL HA4522 Holding Cabinet



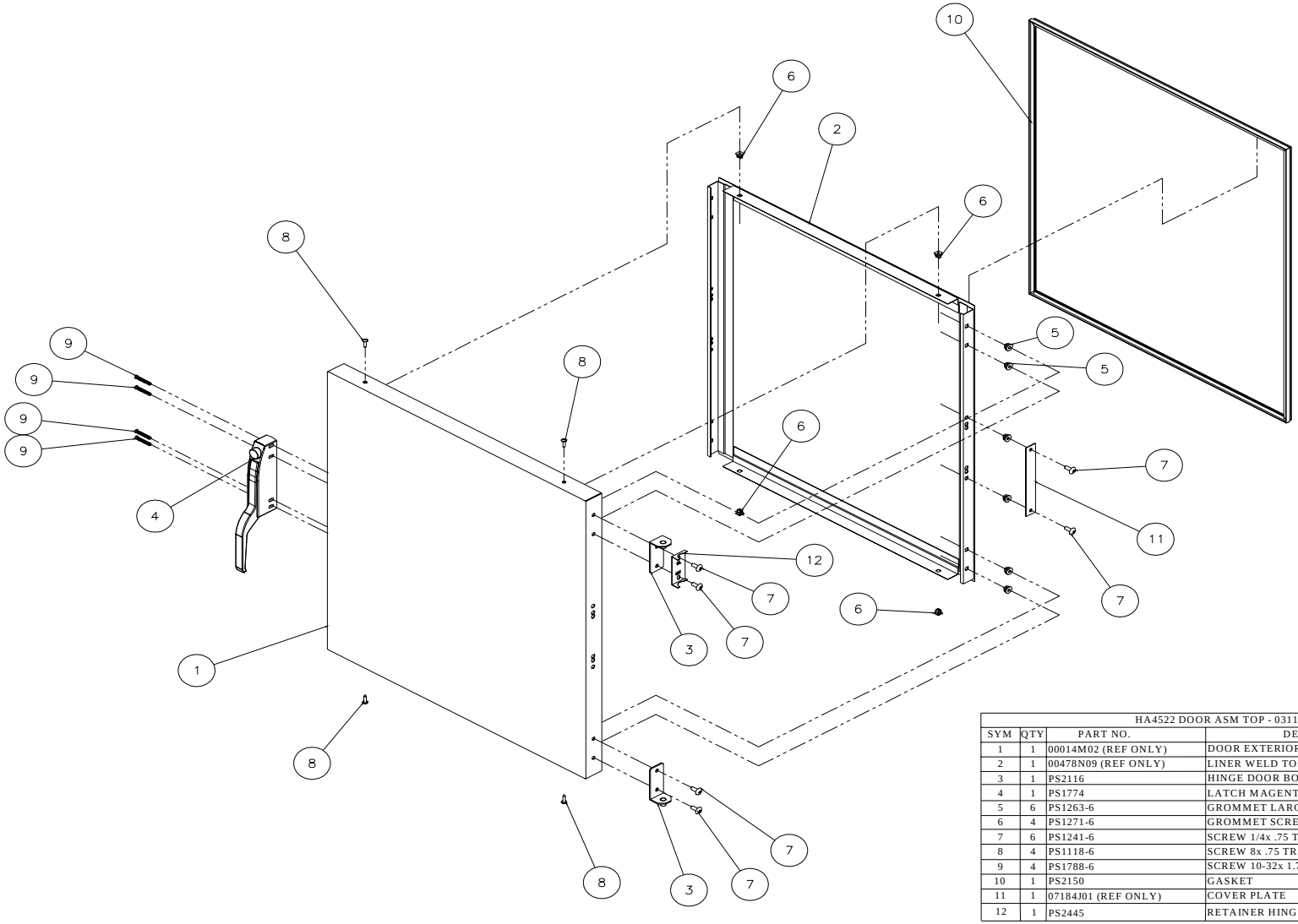
HA4522 ESC/CTRL ASM			
SYM	QTY	PART NO.	DESCRIPTION
1	1	PS2251, PS2609 (A-series), PS2710 (rework)	CONTROL ASM DIFF 120V
2	1	2561W02 (REF ONLY)	WELDED ESCUTCHEON
3	1	REF ONLY - OBS Component	SWITCH
4	4	PS1119-6	NUT SPEED
5	4	4107J10 (REF ONLY)	SCREW #8x .50
6	1	PS2304	SWITCH ASM

WINSTON CVAP MODEL HA4522 Holding Cabinet



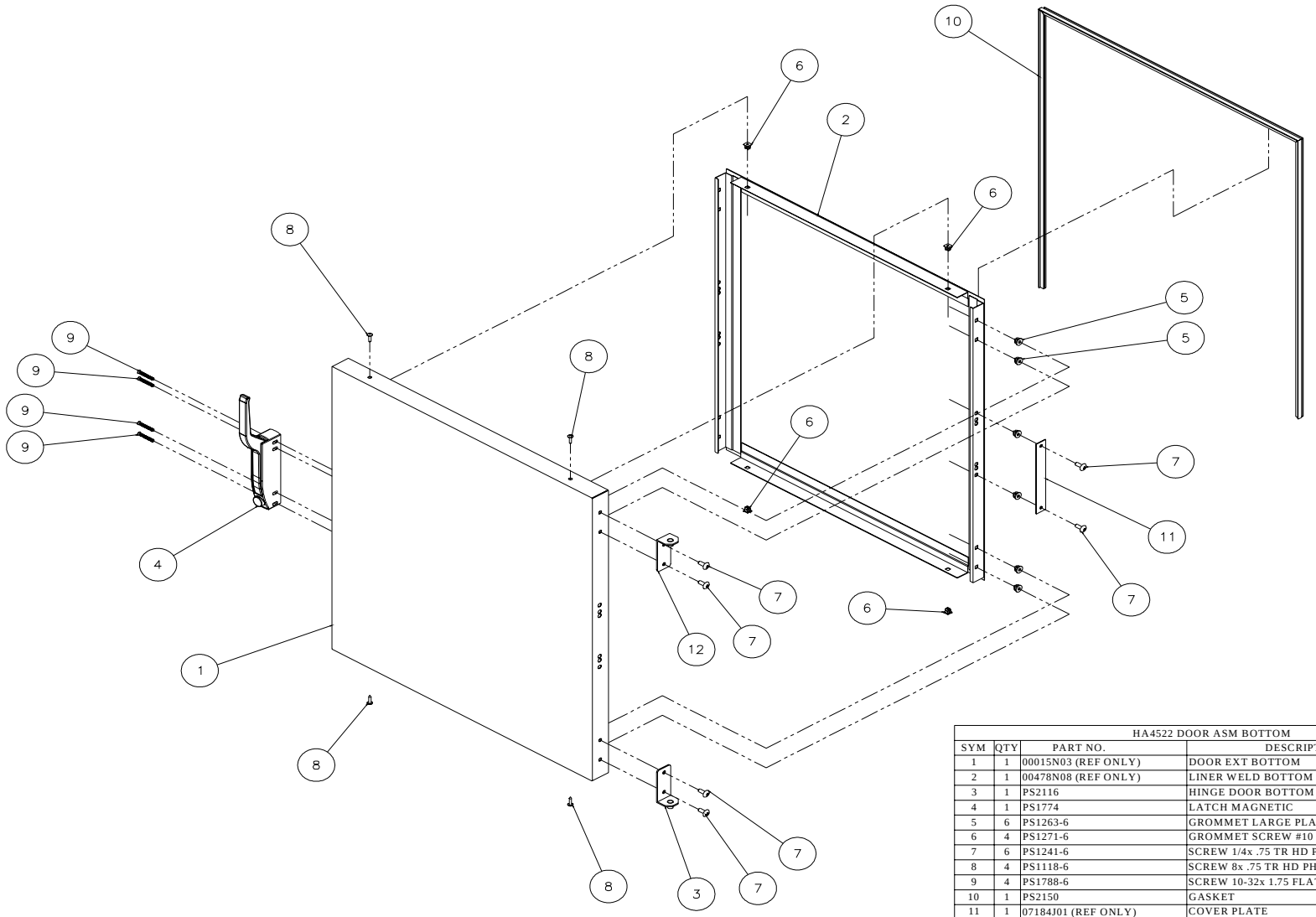
HA4522 Top Interior Motor ASM			
SYM	QTY	PART NO.	DESCRIPTION
1	1	00250M03 (REF ONLY)	COVER TOP INT
2	1	PS2148	FAN 6.25 DIA.
3	4	PS1819-6	NUT FLANGE LOCK 1/4-20
4	4	PS1233-6	NUT HEX 10-32
5	1	00283U06 (REF ONLY)	SEAL SHAFT .312
6	1	00276M02 (REF ONLY)	SHAFT RETAINER
7	1	00394M02 (REF ONLY)	TOP INT WELD
8	1	00443M01 (REF ONLY)	TOP MOTOR INSULATION
9	4	01122N01 (REF ONLY)	WASHER
10	1	PS2051 (120V), PS2100 (240V)	MOTOR ASM

WINSTON CVAP MODEL HA4522 Holding Cabinet



HA4522 DOOR ASM TOP - 03112M24			
SYM	QTY	PART NO.	DESCRIPTION
1	1	00014M02 (REF ONLY)	DOOR EXTERIOR
2	1	00478N09 (REF ONLY)	LINER WELD TOP
3	1	PS2116	HINGE DOOR BOTTOM
4	1	PS1774	LATCH MAGENTIC
5	6	PS1263-6	GROMMET LARGE PLASTIC
6	4	PS1271-6	GROMMET SCREW #10
7	6	PS1241-6	SCREW 1/4x .75 TR HD PH
8	4	PS1118-6	SCREW 8x .75 TR HD PH
9	4	PS1788-6	SCREW 10-32x 1.75 FLAT HD PH
10	1	PS2150	GASKET
11	1	07184J01 (REF ONLY)	COVER PLATE
12	1	PS2445	RETAINER HINGE DOOR

WINSTON CVAP MODEL HA4522 Holding Cabinet



HA4522 DOOR ASM BOTTOM			
SYM	QTY	PART NO.	DESCRIPTION
1	1	00015N03 (REF ONLY)	DOOR EXT BOTTOM
2	1	00478N08 (REF ONLY)	LINER WELD BOTTOM
3	1	PS2116	HINGE DOOR BOTTOM
4	1	PS1774	LATCH MAGNETIC
5	6	PS1263-6	GROMMET LARGE PLASTIC
6	4	PS1271-6	GROMMET SCREW #10
7	6	PS1241-6	SCREW 1/4x .75 TR HD PH
8	4	PS1118-6	SCREW 8x .75 TR HD PH
9	4	PS1788-6	SCREW 10-32x 1.75 FLAT HD PH
10	1	PS2150	GASKET
11	1	07184J01 (REF ONLY)	COVER PLATE
12	1	PS2116	HINGE DOOR TOP

Winston Products International, Ltd.
CVAP Holding/Proofing Cabinet
(Non surface-mounted controls)
International Parts Identification Manual

WINSTON
Products International, Ltd.

Lit. #4275R102 - 7/11/01

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

Photo Reference ..... 1 - 5

Parts Descriptions & Order Numbers ..... 6 - 8

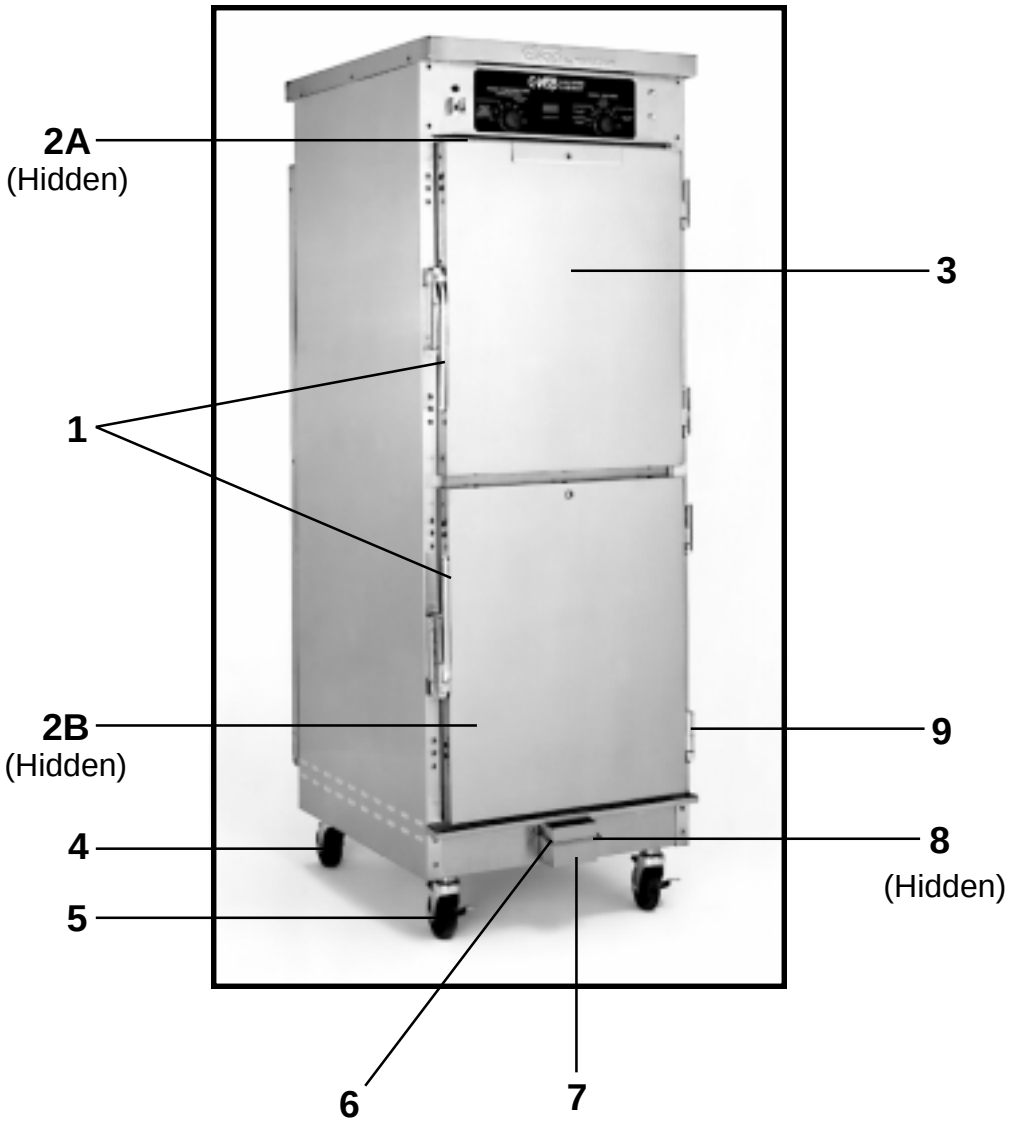
How To Use This Manual

Use Photo Reference (pages 1 - 5) to identify parts. Match Photo Reference numbers with Parts Descriptions and Order Numbers (pages 6 - 8).

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers

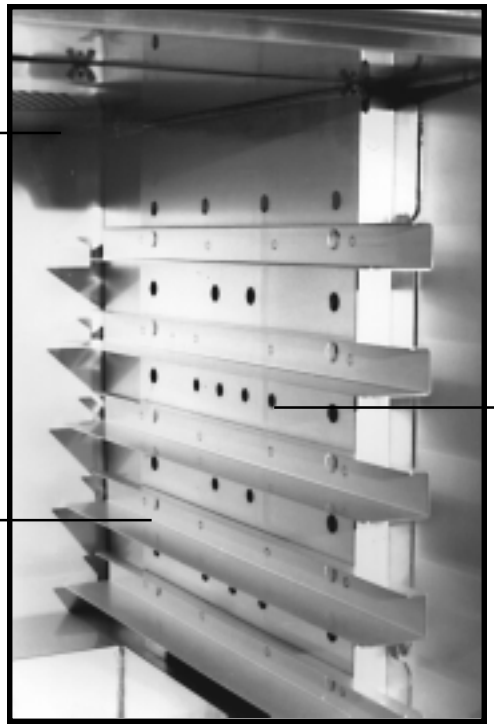


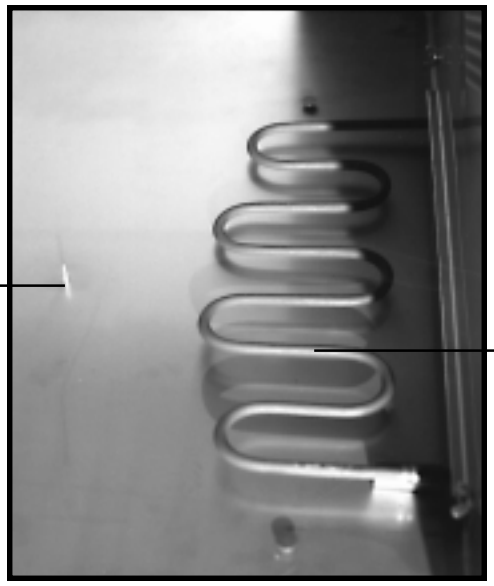
Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers



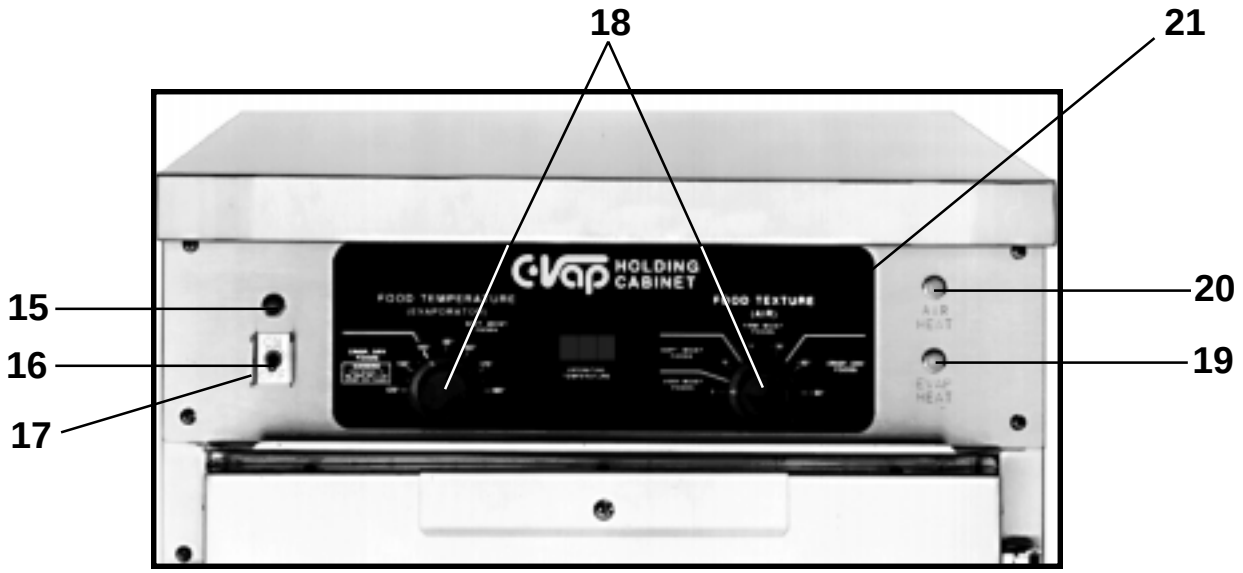


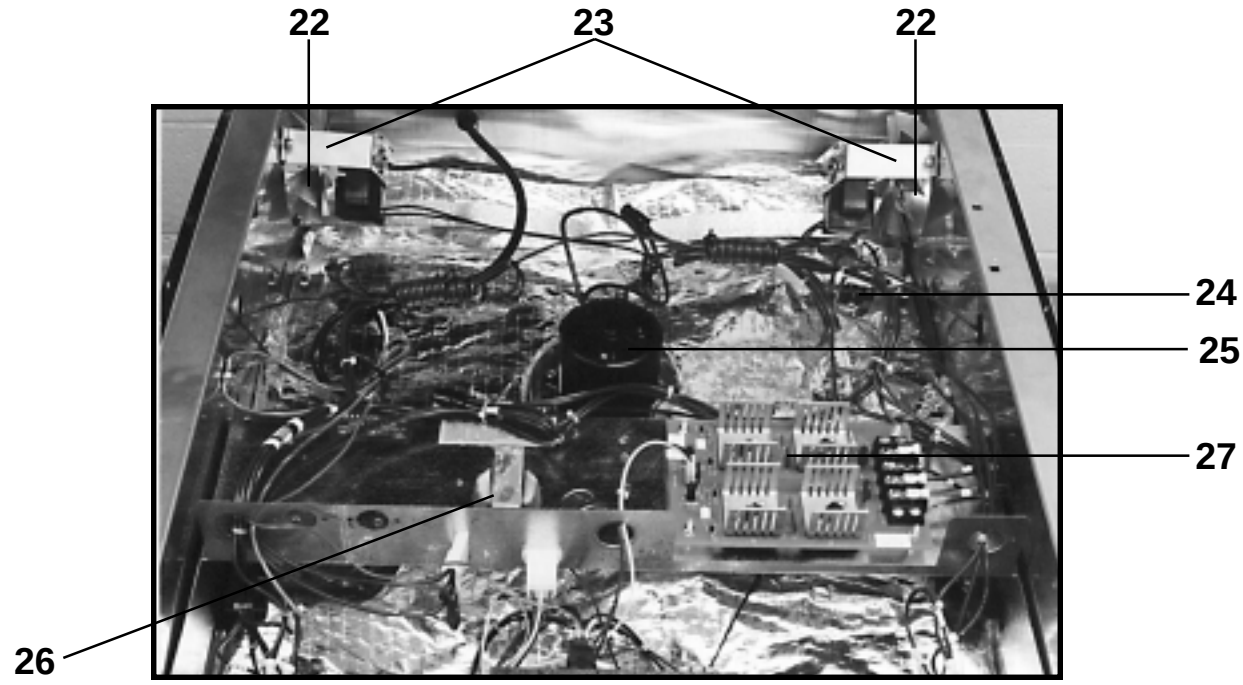
Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers



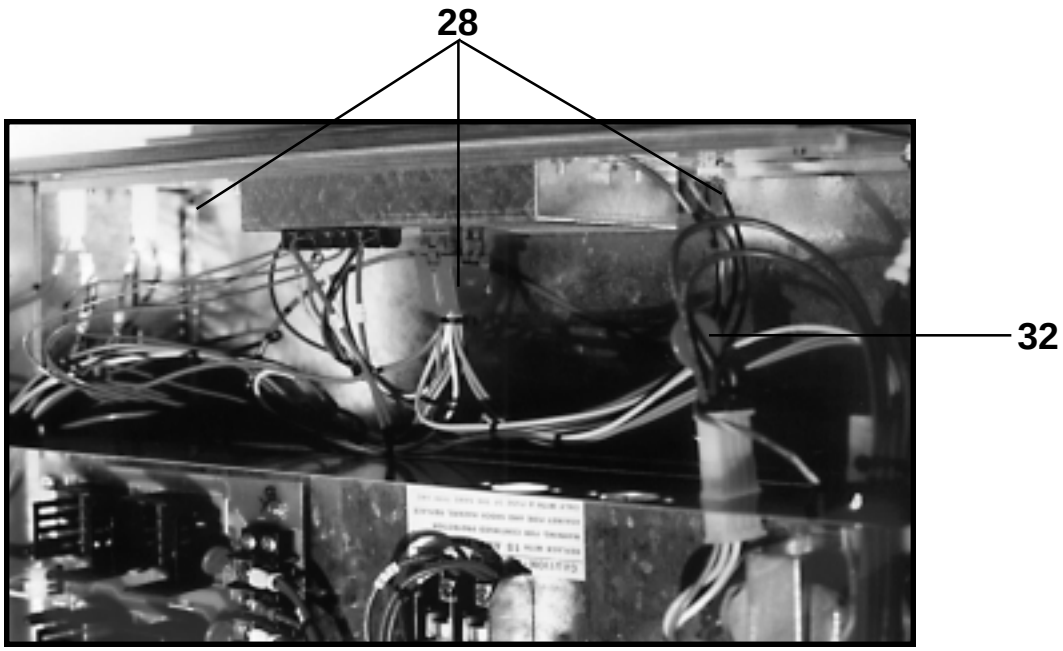


Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers



WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers

Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
1	**Door Handle - adapter lexan to chrome** **Door Handle - Stainless Steel**	**PS2230** **PS1774**
2A	**Door Gasket - Top *(HA4019 & HA4519)*** **Door Gasket - Top *(HA4522)***	**PS1442** **PS2151**
2B	**Door Gasket - Bottom *(HA4019 & HA4519)*** **Door Gasket - Bottom *(HA4522)*** **Door Gasket - *(HA4508)***	**PS1446** **PS2150** **PS1446**
3	**Door Assembly**	***Ref. Only***
4	**Caster - Rear, Non-Locking** *(For all units except Under Counter Model)*	**PS2147**
5	**Caster - Front, Locking** *(For all units except Under Counter Model)*	**PS2146**
6	**Drip Cup Bail**	**PS2054**
7	**Drip Cup**	**PS2182**
8	**Drip Cup O-ring**	**PS1280/3**
9	**Door Hinge** *(Kit accommodates one door)*	**PS2116**
10	**Circulating Fan Blade**	**PS2148**
11	**Flue Assembly/Shelf Rack Assembly**	***Ref. Only***

WINSTON CVAP BRAND HOLDING/PROOFING CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
12	Rail	*Ref. Only*
13	Air Thermocouple Probe	PS1643
14	Air Heater *(120 Volt)* Air Heater *(240 Volt)*	PS2067 PS2099
15	Power On Lamp *(120 Volt)* Power On Lamp *(240 Volt)*	PS1103/3 PS1012/3
16	On/Off Switch	PS1529
17	On/Off Switch Guard	PS1086
18	Control Knobs	PS1250
19	Evaporator Heat Lamp *(120 Volt)* Evaporator Heat Lamp *(240 Volt)*	PS1103/3 PS1012/3
20	Air Heat Lamp *(120 Volt)* Air Heat Lamp *(240 Volt)*	PS1103/3 PS1012/3
21	Overlay Panel	*Ref. Only*
22	Cooling Fan Blades	PS2083
23	Cooling Fans Motor *(120 Volt)* Cooling Fans Motor *(240 Volt)*	PS2066 PS2098
24	Hi Limit Thermostat	PS2199

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

Photo Reference Number	Part Description	Order Number
25	Circulating Fan Motor *(120 Volt)* Circulating Fan Motor *(240 Volt)*	PS2051 PS2100
26	Transformer *(120 Volt)* Transformer *(240 Volt)*	PS1644 PS1687
27	Power Board	PS1639
28	Wiring Sub Harness with Potentiometer	PS1958
29	Differential Control	PS2001
30	Air Thermocouple	PS1643
31	Water Thermocouple	PS1642
32	Varistor *(150 Volt)* Varistor *(275 Volt)*	PS1234/3 PS1267
33	Cabinet Bottom Panel	*Ref. Only*
34	Water Thermocouple	PS1642
35	Water Heater *(120 Volt)* Water Heater *(240 Volt)*	PS2068 PS1711
36	Drain Pipe	PS1629

NOTE: See pages 1 - 5 for Photo Reference

Lit. #4275R102 - 11/96

Winston Products International, Ltd.
CVAP Holding/Proofing Cabinet
(Non surface-mounted controls)
International Parts Identification Manual

WINSTON
Products International, Ltd.

Lit. #4275R102 - 7/11/01

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

Photo Reference ..... 1 - 5

Parts Descriptions & Order Numbers ..... 6 - 8

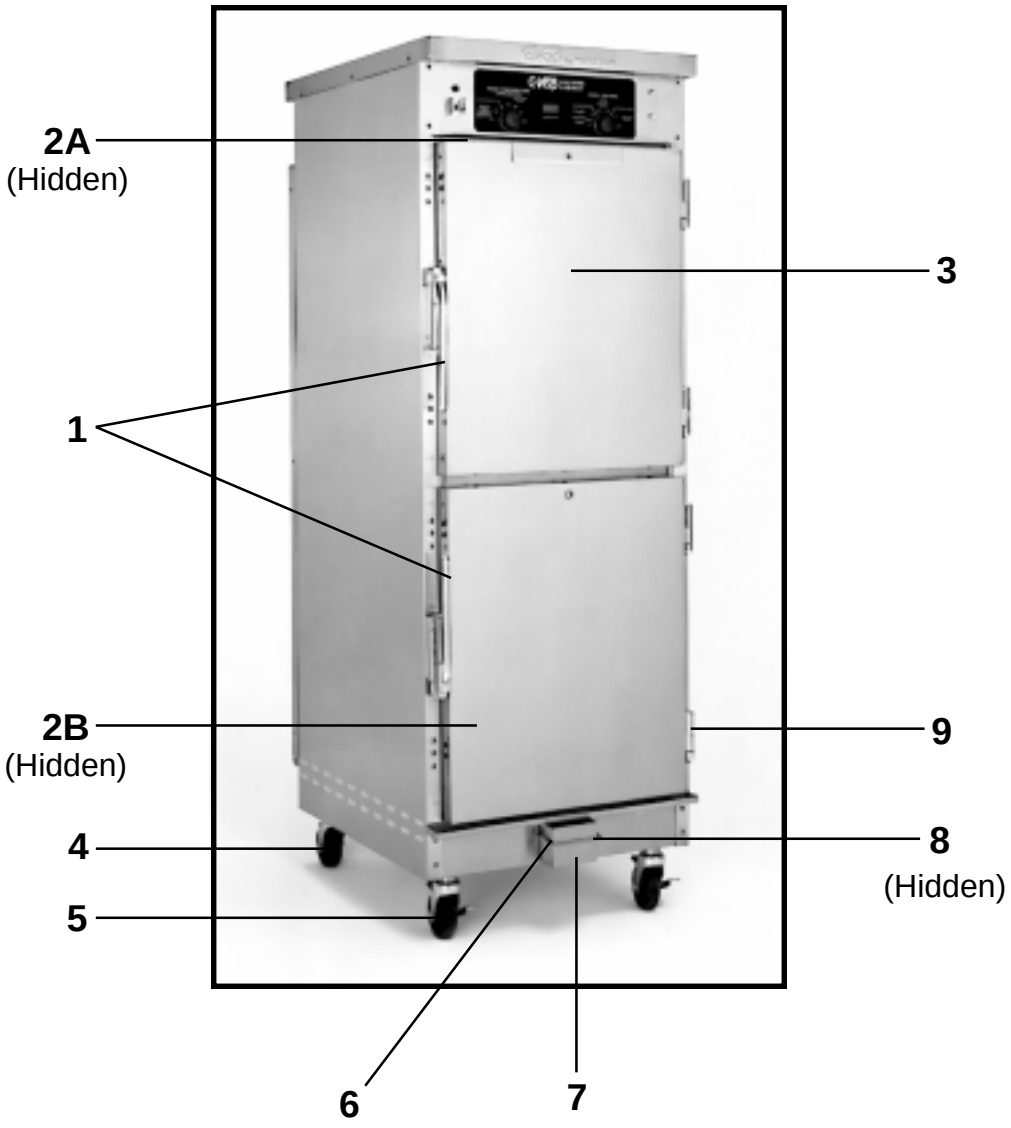
How To Use This Manual

Use Photo Reference (pages 1 - 5) to identify parts. Match Photo Reference numbers with Parts Descriptions and Order Numbers (pages 6 - 8).

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers

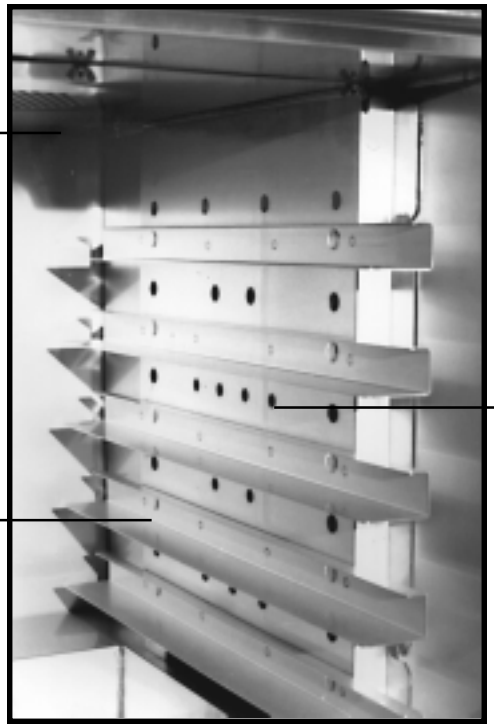


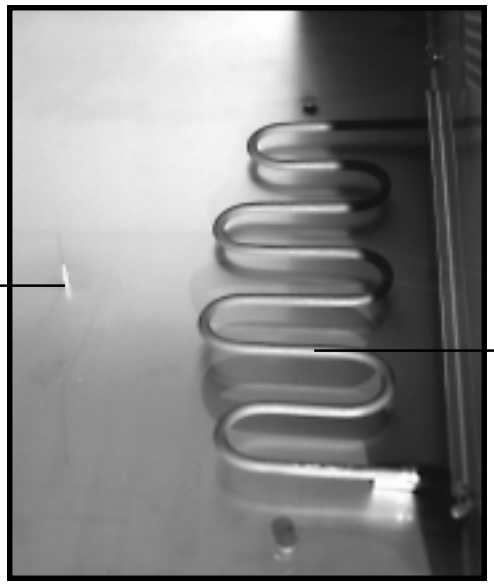
Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers



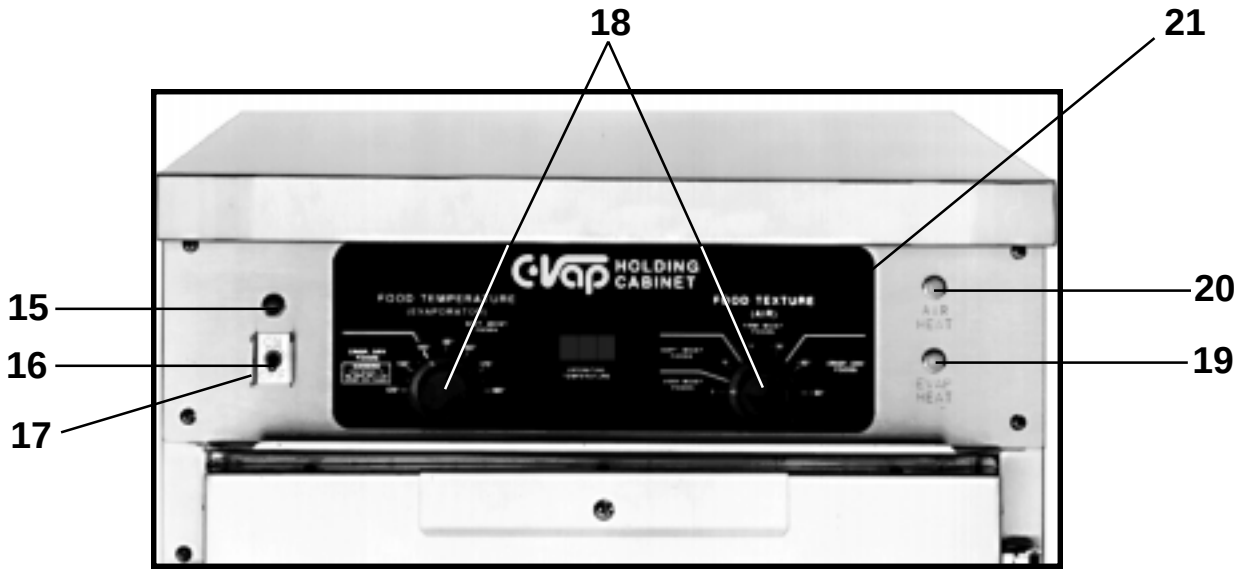


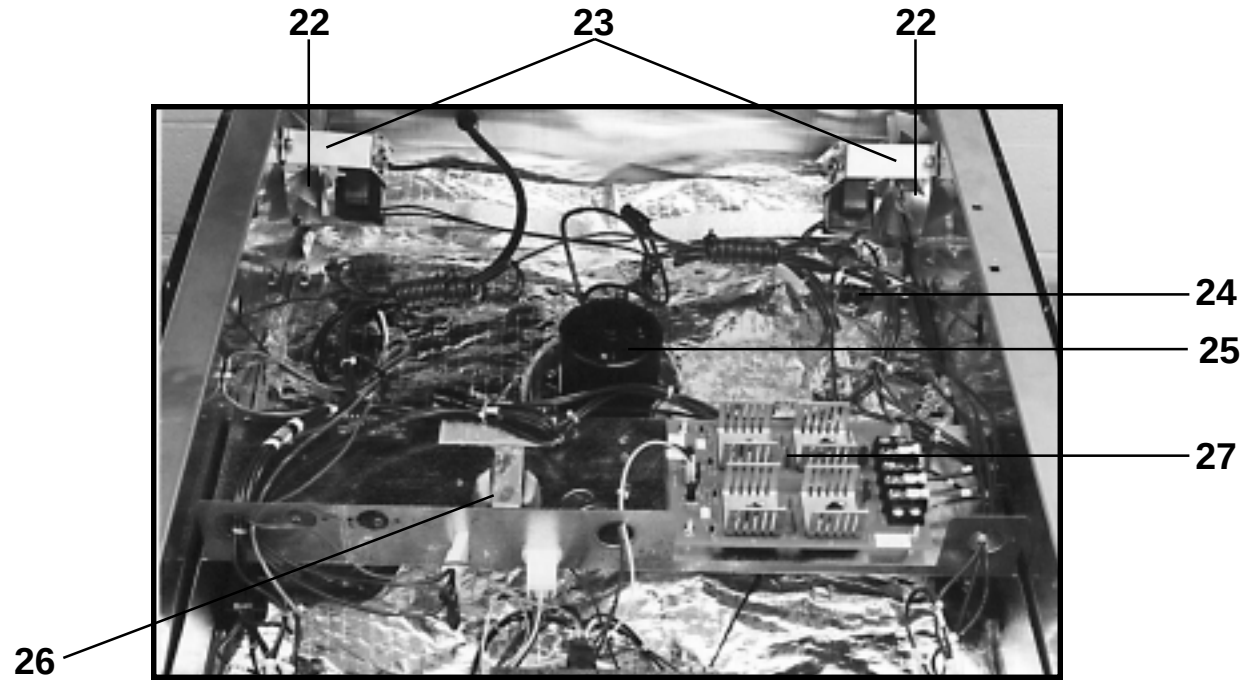
Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers



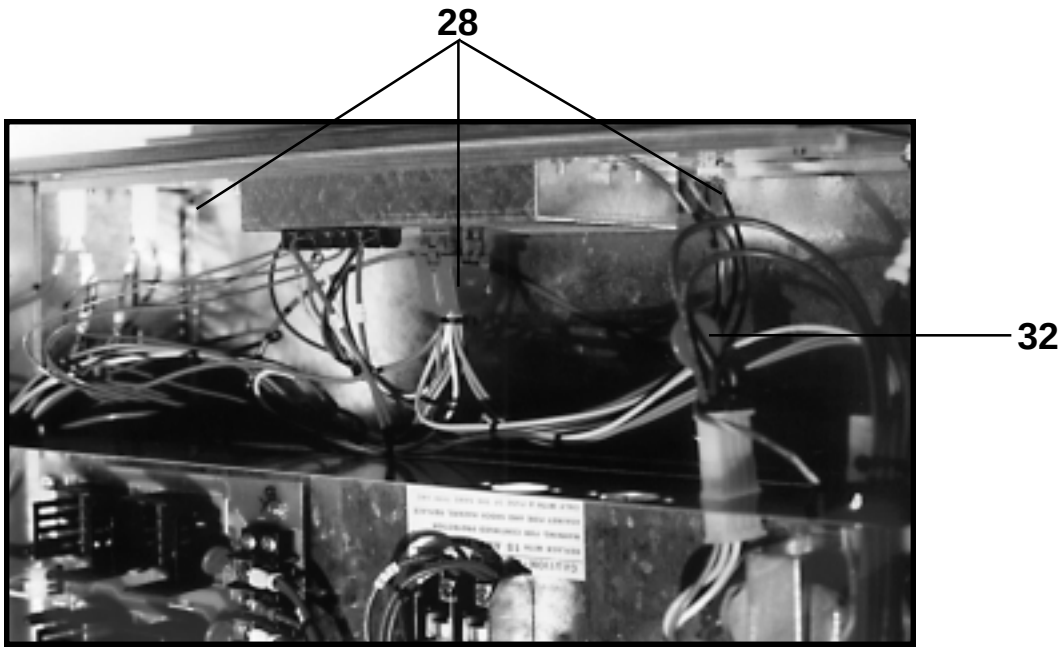


Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers



WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See page 6 - 8 for Parts Descriptions and Order Numbers

Winston Products International, Ltd.

WINSTON CVAP BRAND HOLDING/PROOFING CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
1	**Door Handle - adapter lexan to chrome** **Door Handle - Stainless Steel**	**PS2230** **PS1774**
2A	**Door Gasket - Top *(HA4019 & HA4519)*** **Door Gasket - Top *(HA4522)***	**PS1442** **PS2151**
2B	**Door Gasket - Bottom *(HA4019 & HA4519)*** **Door Gasket - Bottom *(HA4522)*** **Door Gasket - *(HA4508)***	**PS1446** **PS2150** **PS1446**
3	**Door Assembly**	***Ref. Only***
4	**Caster - Rear, Non-Locking** *(For all units except Under Counter Model)*	**PS2147**
5	**Caster - Front, Locking** *(For all units except Under Counter Model)*	**PS2146**
6	**Drip Cup Bail**	**PS2054**
7	**Drip Cup**	**PS2182**
8	**Drip Cup O-ring**	**PS1280/3**
9	**Door Hinge** *(Kit accommodates one door)*	**PS2116**
10	**Circulating Fan Blade**	**PS2148**
11	**Flue Assembly/Shelf Rack Assembly**	***Ref. Only***

WINSTON CVAP BRAND HOLDING/PROOFING CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
12	Rail	*Ref. Only*
13	Air Thermocouple Probe	PS1643
14	Air Heater *(120 Volt)* Air Heater *(240 Volt)*	PS2067 PS2099
15	Power On Lamp *(120 Volt)* Power On Lamp *(240 Volt)*	PS1103/3 PS1012/3
16	On/Off Switch	PS1529
17	On/Off Switch Guard	PS1086
18	Control Knobs	PS1250
19	Evaporator Heat Lamp *(120 Volt)* Evaporator Heat Lamp *(240 Volt)*	PS1103/3 PS1012/3
20	Air Heat Lamp *(120 Volt)* Air Heat Lamp *(240 Volt)*	PS1103/3 PS1012/3
21	Overlay Panel	*Ref. Only*
22	Cooling Fan Blades	PS2083
23	Cooling Fans Motor *(120 Volt)* Cooling Fans Motor *(240 Volt)*	PS2066 PS2098
24	Hi Limit Thermostat	PS2199

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

Photo Reference Number	Part Description	Order Number
25	Circulating Fan Motor *(120 Volt)* Circulating Fan Motor *(240 Volt)*	PS2051 PS2100
26	Transformer *(120 Volt)* Transformer *(240 Volt)*	PS1644 PS1687
27	Power Board	PS1639
28	Wiring Sub Harness with Potentiometer	PS1958
29	Differential Control	PS2001
30	Air Thermocouple	PS1643
31	Water Thermocouple	PS1642
32	Varistor *(150 Volt)* Varistor *(275 Volt)*	PS1234/3 PS1267
33	Cabinet Bottom Panel	*Ref. Only*
34	Water Thermocouple	PS1642
35	Water Heater *(120 Volt)* Water Heater *(240 Volt)*	PS2068 PS1711
36	Drain Pipe	PS1629

NOTE: See pages 1 - 5 for Photo Reference

Lit. #4275R102 - 11/96

Winston
CVAP® Holding/Proofing Cabinet
(Surface-mounted controls)
Parts Identification Manual

WINSTON PRODUCTS CO.
2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

Lit. #4275R95 - 8/98

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

Photo Reference ..... 1 - 5

Parts Descriptions & Order Numbers ..... 6 - 7

How To Use This Manual

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WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

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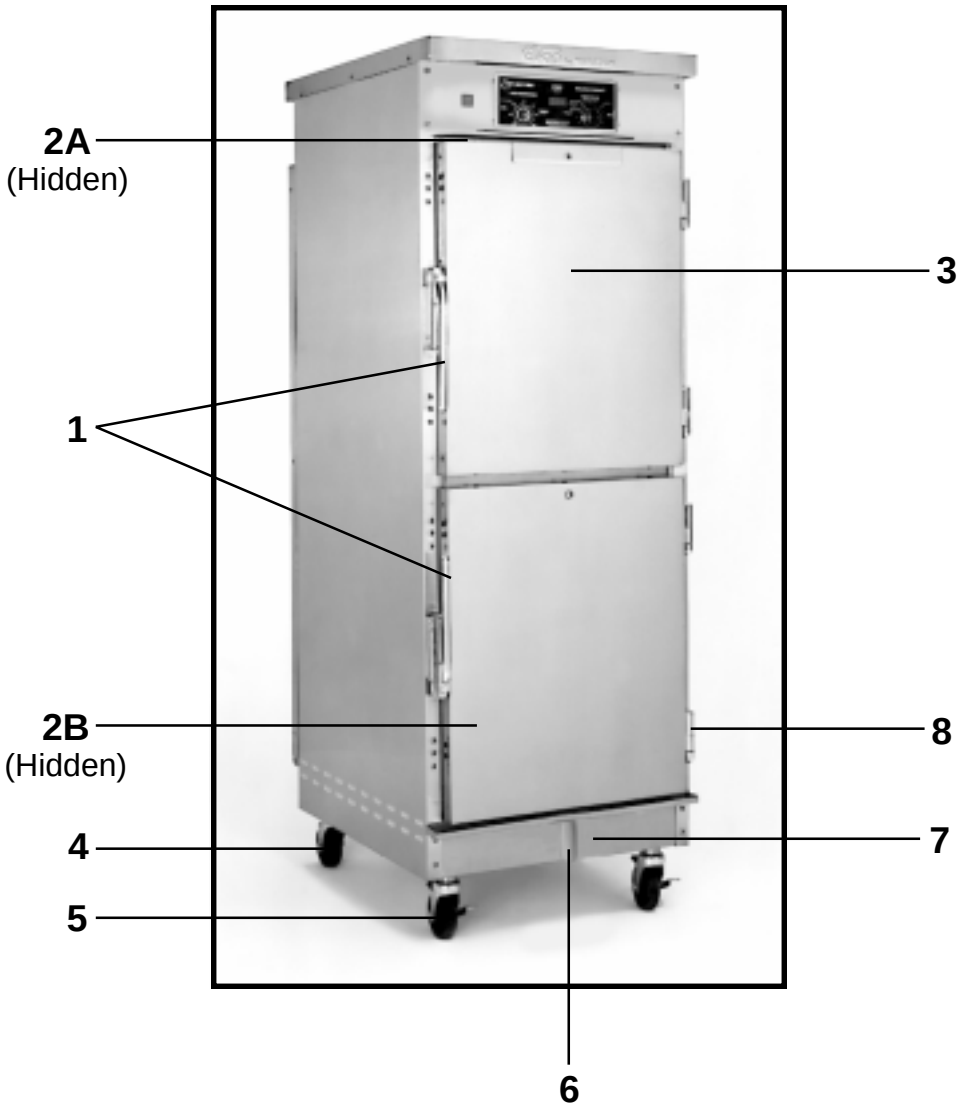


To order parts, contact your Winston representative or call the International office:

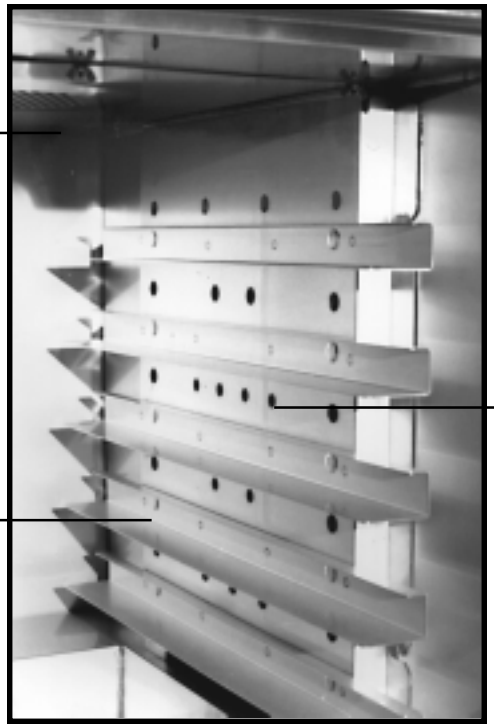
Winston Products Co.

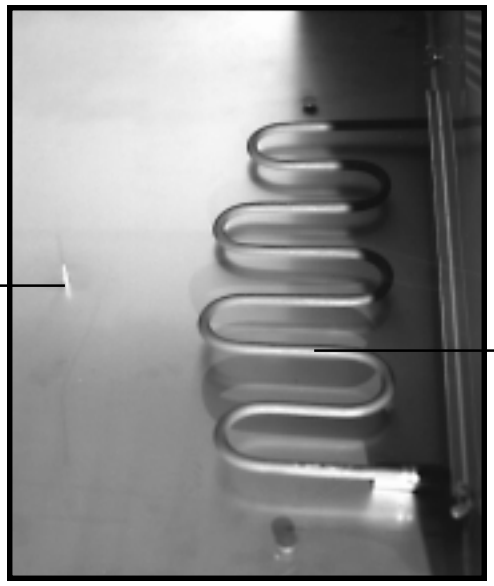
(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON CVAP BRAND HOLDING/PROOFING CABINET

Parts Identification

NOTE: See pages 6 - 7 for Parts Descriptions and Order Numbers





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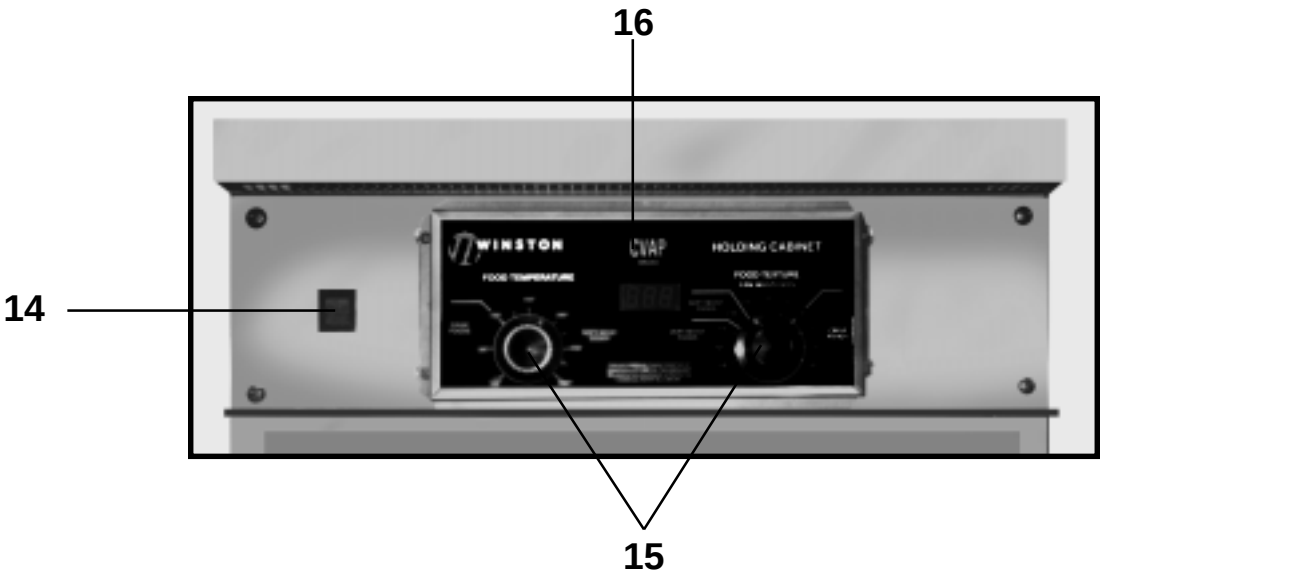

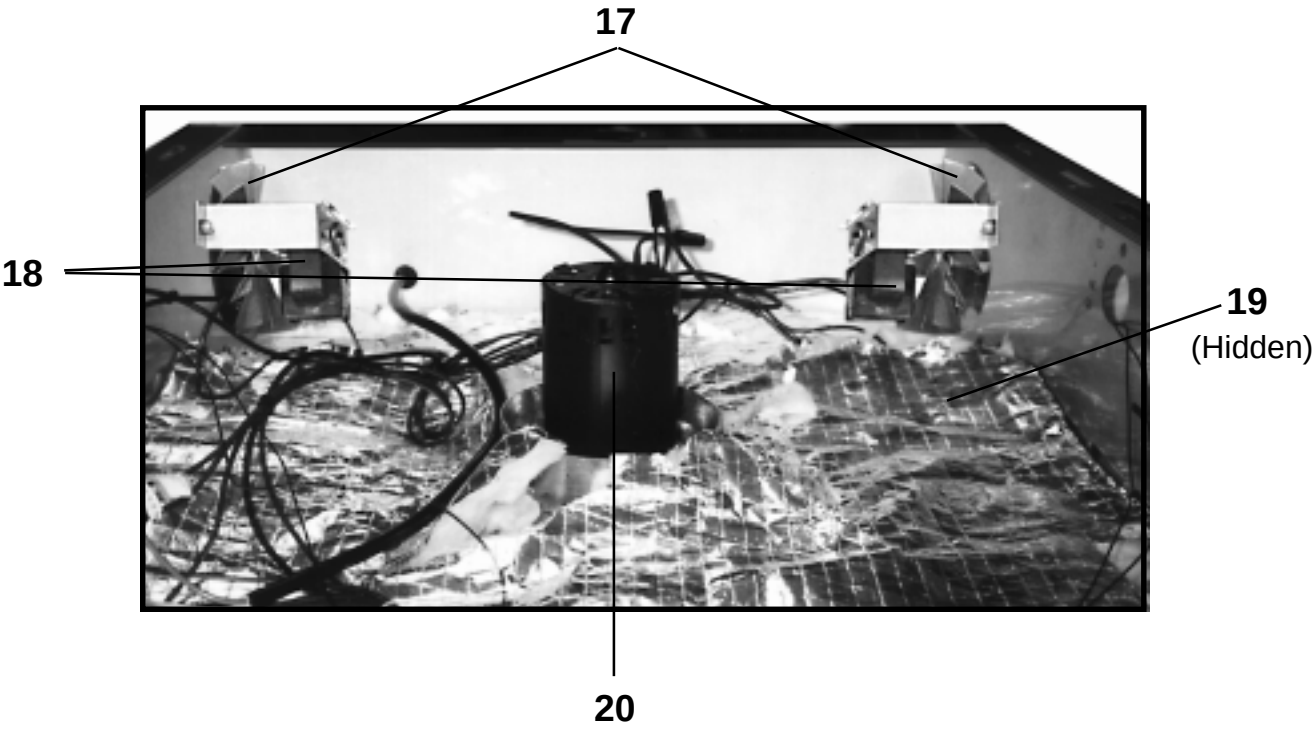

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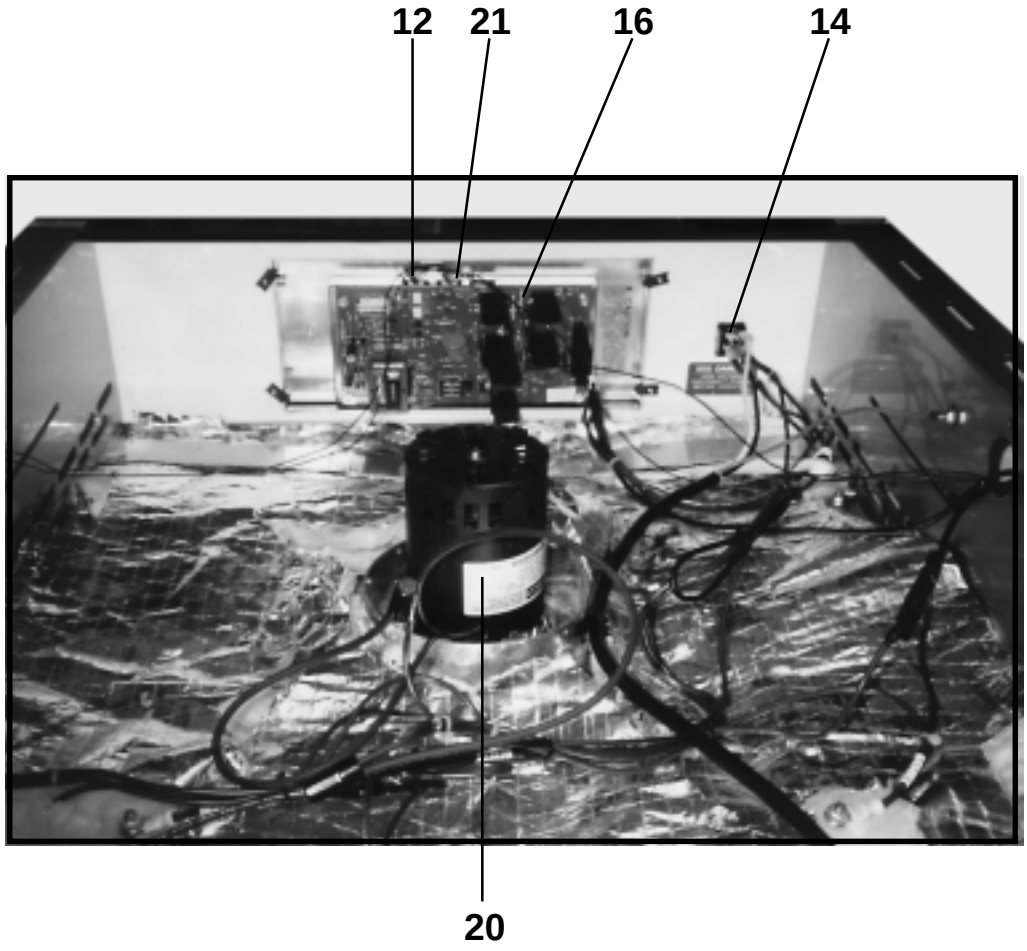

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WINSTON CVAP BRAND HOLDING/PROOFING CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
1	**Door Handle - Stainless Steel**	**PS1774**
2A	**Door Gasket - Top** ***(HA4019 & HA4519)***	**PS1442**
	Door Gasket - Top ***(HA4522)***	**PS2151**
2B	**Door Gasket - Bottom** ***(HA4019 & HA4519)***	**PS1446**
	Door Gasket - Bottom ***(HA4522)***	**PS2150**
	Door Gasket - ***(HA4508)***	**PS1446**
3	**Door Assembly**	***Ref. Only***
4	**Caster – Rear, Non-Locking** *(For all units except Under Counter Model)*	**PS2311**
5	**Caster – Front, Locking** *(For all units except Under Counter Model)*	**PS2310**
6	**Site Tube and Clamp**	**PS2319**
7	**Drain Cap**	**PS1654**
8	**Door Hinge** *(Kit accommodates one door)*	**PS2116**
9	**Circulating Fan Blade**	**PS2148**
10	**Flue Assembly/Shelf Rack Assembly**	***Ref. Only***
11	**Rail**	***Ref. Only***
12	**Air Probe**	**PS2255**

WINSTON CVAP BRAND HOLDING/PROOFING CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
13	Air Heater *(120 Volt)*	PS2067
	Air Heater *(240 Volt)*	PS2099
14	On/Off Switch	PS2304
15	Control Knobs	PS1250
16	Control Board Assembly (120 Volt)	PS2251
	Control Board Assembly (240 Volt)	PS2252
17	Cooling Fan Blades	PS2083
18	Cooling Fans Motor *(120 Volt)*	PS2066
	Cooling Fans Motor *(240 Volt)*	PS2098
19	Hi Limit Thermostat	PS2199
20	Circulating Fan Motor *(120 Volt)*	PS2051
	Circulating Fan Motor *(240 Volt)*	PS2100
21	Water Probe	PS2256
22	Cabinet Bottom Panel	*Ref. Only*
23	Water Heater *(120 Volt)*	PS2068
	Water Heater *(240 Volt)*	PS1711
24	Drain Pipe	*Ref. Only*

NOTE: See pages 1 - 5 for Photo Reference

Lit. #4275R95 - 8/98

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Winston Products Co.
(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

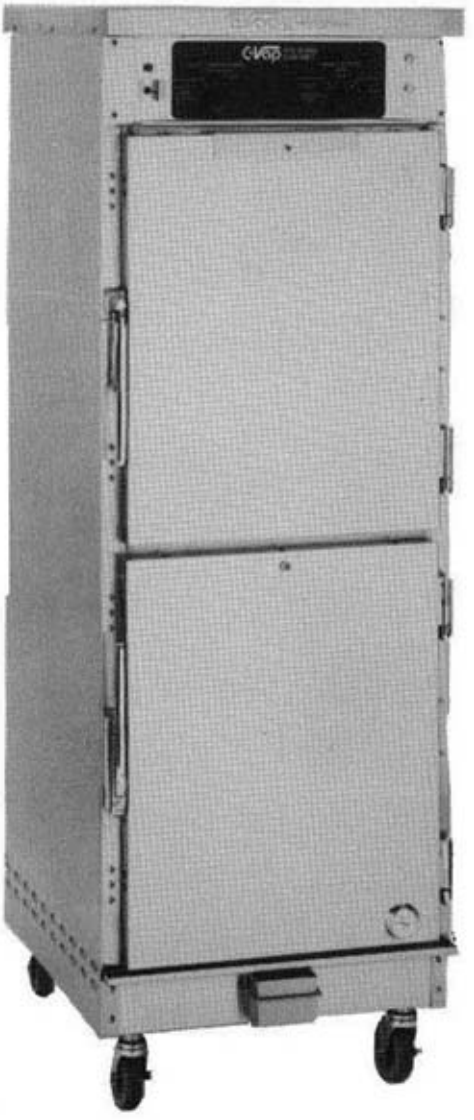
SERVICE MANUAL

CVAP

VAPOR OVEN

'DIFFERENTIAL CONTROLLED'

LIT 6529



DANGER

The procedures contained in this manual involve accessing bare electrical terminals and exposure to voltages capable of producing serious injury or death. Any person attempting diagnosis and/or repair involving removal of panels and/or exposure to live electrical components must be trained or experienced in such service procedures. Disconnect electrical service while performing the procedures listed in this manual.

WINSTON
PRODUCTS COMPANY

2345 CARTON DRIVE • LOUISVILLE, KENTUCKY • 40299 • (800) 234-5286 • FAX: (502) 495-5458

INTRODUCTION

This service manual is to be used for the following model CVAP Vapor Ovens:

MODEL NO.	MARKET
CB21D01SE	USA
CB53D01SE	USA
CB53D02SE	USA
CC16D01SE	USA
CG15D01SE	USA
CB53D03SE	CANADA
CB21D51SK	EUROPE/BAHAMAS
CB53D51SK	EUROPE/BAHAMAS
CC16D51SK	EUROPE/BAHAMAS

Knowledge of the proper installation, operation and maintenance procedures is an important step to insure safe operation of any equipment. The instructions in this manual are meant as guidelines for the proper operation of the CVAP VAPOR OVEN. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following two signal words are used throughout this handbook where applicable.

DANGER: Used to indicate the presence of a hazard which could cause substantial property damage, severe personal injury or death if warning is ignored.

CAUTION: Used to indicate the presence of a hazard which could cause minor property damage or personal injury if warning is ignored.

DANGER: THE PROCEDURES CONTAINED IN THIS MANUAL INVOLVE ACCESSING BARE ELECTRICAL TERMINALS AND EXPOSURE TO VOLTAGES CAPABLE OF PRODUCING SERIOUS INJURY OR DEATH. ANY PERSONS ATTEMPTING DIAGNOSIS AND/OR REPAIR INVOLVING REMOVAL OF PANELS AND/OR EXPOSURE TO LIVE ELECTRICAL COMPONENTS MUST BE TRAINED OR EXPERIENCED IN SUCH SERVICE PROCEDURES. DISCONNECT ELECTRICAL SERVICE WHILE PERFORMING THE PROCEDURES LISTED IN THIS MANUAL.

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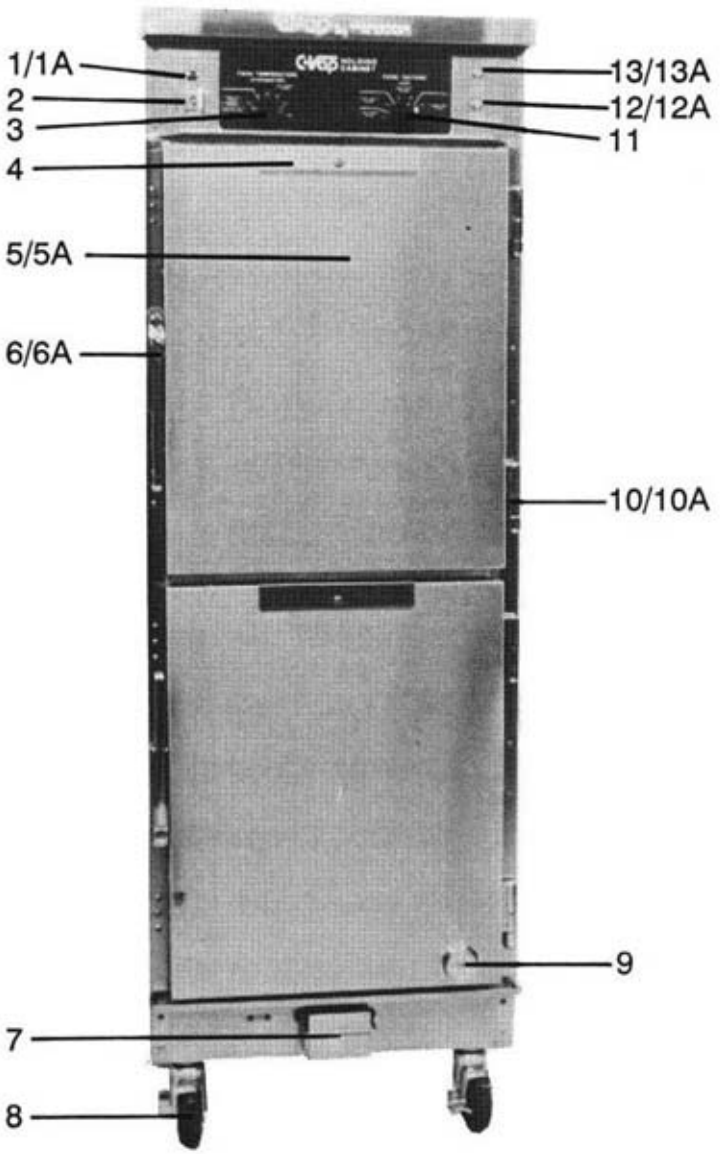
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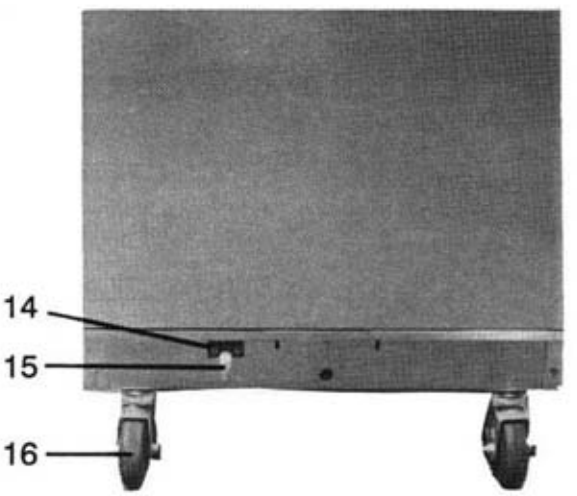
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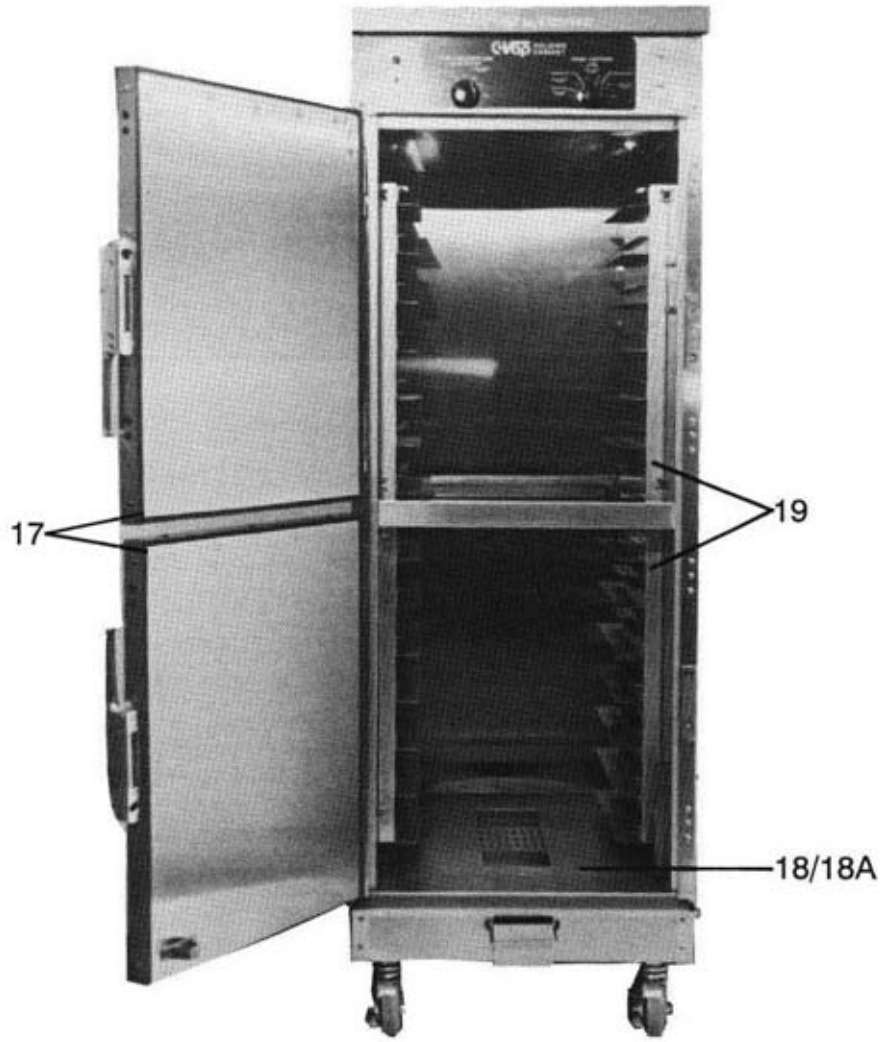
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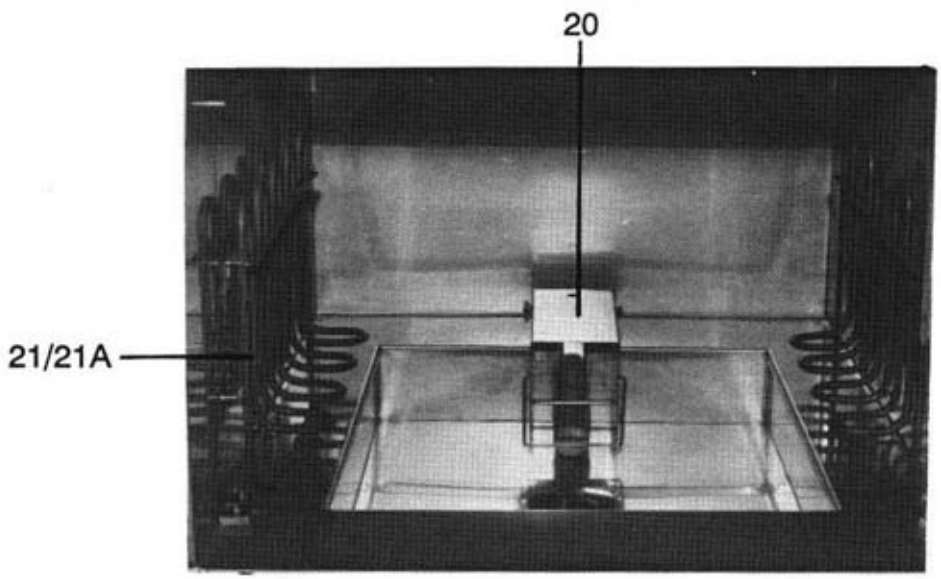
18/18A


20
21/21A

HOT FOOD HOLDING PROCEDURES

CAUTION: Make certain evaporator tank has an adequate supply of water prior to turning power switch on. Water level, as indicated in drip cup, should be approximately 1/2" from overflow level.

1. **SET FOOD TEMPERATURE (EVAPORATOR) CONTROL and FOOD TEXTURE (AIR) CONTROL** to appropriate temperatures corresponding to products being held. Table I(cooked food holding in the CVAP Holding Cabinet) gives recommended temperatures corresponding to a wide variety of products.

NOTE: Your holding procedures may be specified to you through franchise agreement (or otherwise); if so, disregard holding temperatures recommended in Table I.

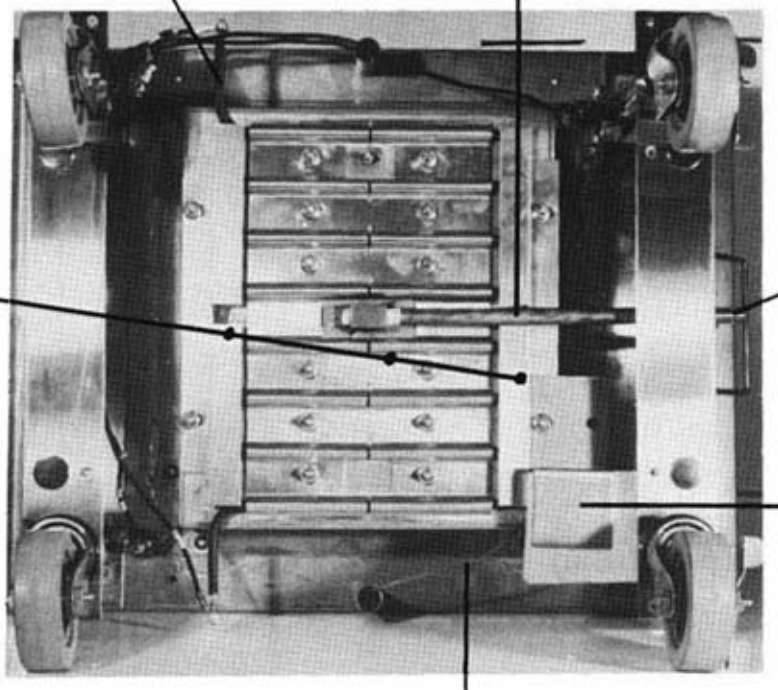
The temperature referred to above may not be adequate instruction for holding selected foods to individual preference. To adjust, hold a sample of the food at recommended temperatures and inspect. Adjust the **FOOD TEMPERATURE CONTROL** to gain the desired temperature. Adjust the **FOOD TEXTURE CONTROL** to obtain the preferred texture.

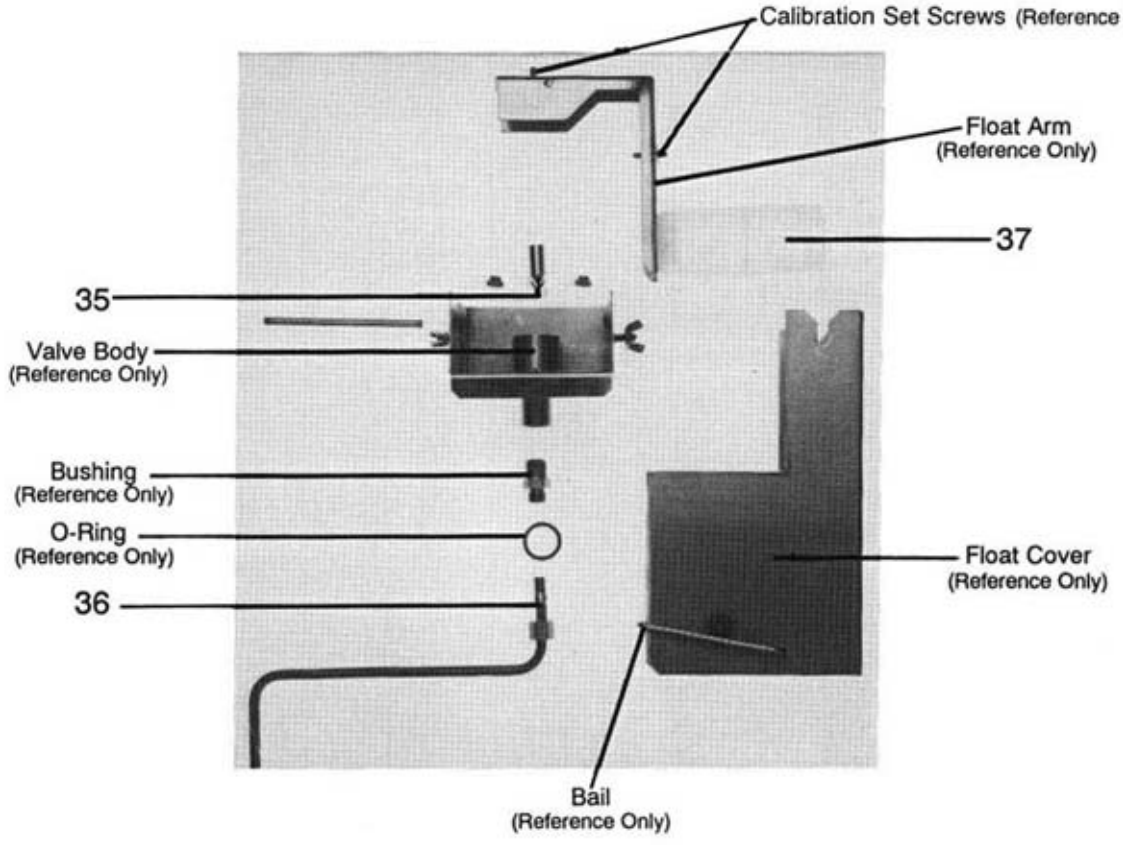
Use a thermometer to assure compliance with local health codes.

2. **TURN ON** power siwtch.
3. **WARM UP** holding cabinet approximately one (1) hour.
4. **LOAD FOODS** into holding cabinet from bottom upward.
5. **REMOVE FOODS** from bottom upward — as needed or as limited by food quality.

The length of time that foods can be held at optimum quality is fully dependent upon the food and the condition under which it is held. Moist foods (such as pasta, potatoes, bakery products) can be held in excess of four (4) hours without noticeable change in quality providing 'door open time' is limited and the controls are set to specification.

If requirements for serving are so frequent as to cause 'door open time' to be frequent, a heat lamp system should be employed where full trays of food are removed from the holding cabinet rather than individual portions. This allows serving without opening the cabinet door. If the holding period under the heat lamp is limited to 1/2 hour, experience has shown that food quality will be affected to only a minor extent. Different foods and individual preferences as to quality may produce a different time limit.


32/32A
33
34
Heater Shields
(Reference Only)
Thermocouple
Cover
and Insulation
(Reference Only)
Water Thermocouple
(See Item #30)


Calibration Set Screws (Reference Only)
Float Arm
(Reference Only)
37
35
Valve Body
(Reference Only)
Bushing
(Reference Only)
O-Ring
(Reference Only)
36
Float Cover
(Reference Only)
Bail
(Reference Only)

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
1	Power Indicator Lamp - 120V	PS1103/3		
1A	" " " - 240V	PS1012/3		
			3	Lamp
2	Switch Guard	PS1086	1	Switch Guard
3	Temperature Control Knob	PS1640	1	Knob
4	Clamp - Instruction Envelope	PS1638	1	Clamp
			1	Screw
			1	Envelope
5	Door Asm (Magnetic Latch)		1	Door Asm
			2	Hinge
			1	Latch
			6	Screw
	Model CB21	PS1804		
	Model CB53 (Top)	PS1772		
	Model CB53 (Bottom)	PS1771		
	Model CG15	PS1803		
5A	Door Asm (Mechanical Latch)		1	Door Asm
			2	Hinge
			1	Latch
			6	Screw
	Model CC16	PS1470		
	Model CB21	PS1471		
	Model CB53 (Top)	PS1472		
	Model CB53 (Bottom)	PS1477		
	Model CG15	PS1479		
6	Magnetic Latch & Magnet Plate	PS1774	1	Latch
			1	Plate
			6	Screw
6A	Mechanical Latch and Catch	PS1256	1	Latch
			1	Catch
			6	Screw
7	Drip Cup	PS1423	1	Drip Cup
			1	Baffle
8	Caster - Locking		2	Caster
	2" (CC/CG Models)	PS1481/2		
	4" (CB/CC Models)	PS1503/2		

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
9	Thermometer	PS1775	1 1 3	Thermometer O-Ring Pop Rivet
10	Hinge Kit (Self Closing) (Used with Magnetic Latches)	PS1773/2	2 2 10	Hinge Hinge Cover Screw
10A	Hinge Kit (Mechanical) (Used with Mechanical Latches)	PS1255/2	2 2 12	Hinge Hinge Cover Screw
11	Texture Control Knob	PS1640	1	Knob
12 12A	Water Heater Indicator Lamp - 120V Water Heater Indicator Lamp - 240V	PS1268/3 PS1668/3	3	Lamp
13 13A	Air Heater Indicator Lamp - 120V Air Heater Indicator Lamp - 240V	PS1268/3 PS1668/3	3	Lamp
14	Water Inlet Fitting	PS1683	1 1	Fitting O-Ring
15	Water Inlet Elbow	PS1242	1	Elbow
16	Caster - Non Locking 2" (CC/CG Models) 4" (CB/CC Models)	 PS1480/2 PS1504/2	2	Caster
17	Door Gasket CB21 Models CB53 Models (Top) CB53 Models (Bottom) CG15 Models CC16 Models	 PS1441 PS1442 PS1446 PS1444 PS1440	1	Gasket
18	Evaporator Cover (Serial No. 14876 and below) CB/CG Models CC Models	 PS1674 PS1796	1	Cover

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
18A	Evaporator Cover (Serial No. 14877 and above)		1	Cover
	CB/CG Models	PS1806		
	CC Models	PS1807		
19	Shelf Rack		1	Shelf Rack
	CB21 Models	PS1650		
	CB53 Models (Top)	PS1646		
	CB53 Models (Bottom)	PS1645		
	CG15 Models	PS1656		
	CC16 Models	PS1802		
20	Float Assembly (Serial No. 14876 and below)	PS1426	1	Cover
			1	Bail
			1	Float Arm
			1	Float Bulb
			1	O-Ring
			2	Washer
			2	Screw
			1	Needle Valve & Seat
			1	Arm Holder
21	Air Heater - 120V, 720W	PS1641		
21A	Air Heater - 240V, 875W	PS1710		
			1	Heater
			2	Ferrule
			2	Compression Nut
			2	Washer
			2	Nut
22	Transformer - 120V	PS1644		
22A	Transformer - 240V	PS1687		
			1	Transformer
23	Thermostat	PS1464	1	Thermostat
24	Power Cord	PS1595	1	Cordset
25	Wire Connector	PS1533/6	6	Wire Connector
26	Circuit Board - Power	PS1639	1	Power Board

PARTS IDENTIFICATION

Photo Item No.	Part Description	Order Number	Kit Content	
			Qty.	Description
27	Wiring Harness	PS1647	1	Wiring Harness
28	Circuit Board - Main	PS1649	1	Control Board & Housing
29	Air Thermocouple	PS1643	1 1 1	Probe Asm Clamp O-Ring
30	Evaporator Thermocouple	PS1642	1	Thermocouple
31	ON/OFF Switch	PS1529	1	Switch
32	Water Heater - 120V, 720W		1 2 2 2	Heater Compression Nut Washer Nut
	CB/CG Models	PS1434		
	CC Models	PS1632		
32A	Water Heater - 240V, 875W		1 2 2 2	Heater Compression Nut Washer Hex Nut
	CB/CG Models	PS1436		
	CC Models	PS1439		
33	Drain Pipe		1	Drain Pipe
	CB/CG Models	PS1629		
	CC Models	PS1630		
34	O-Ring Drain Pipe	PS1280/3	3	O-Ring
35	Needle Valve Seat	PS1418/6	6	Needle Valve Seat
36	Water Line		1 2 2 1	Water Line Ferrule Insert O-Ring
	Copper	PS1419		
	Plastic	PS1735		
37	Float Bulb	PS1657	1 1	Float Bulb Screw

TROUBLESHOOTING

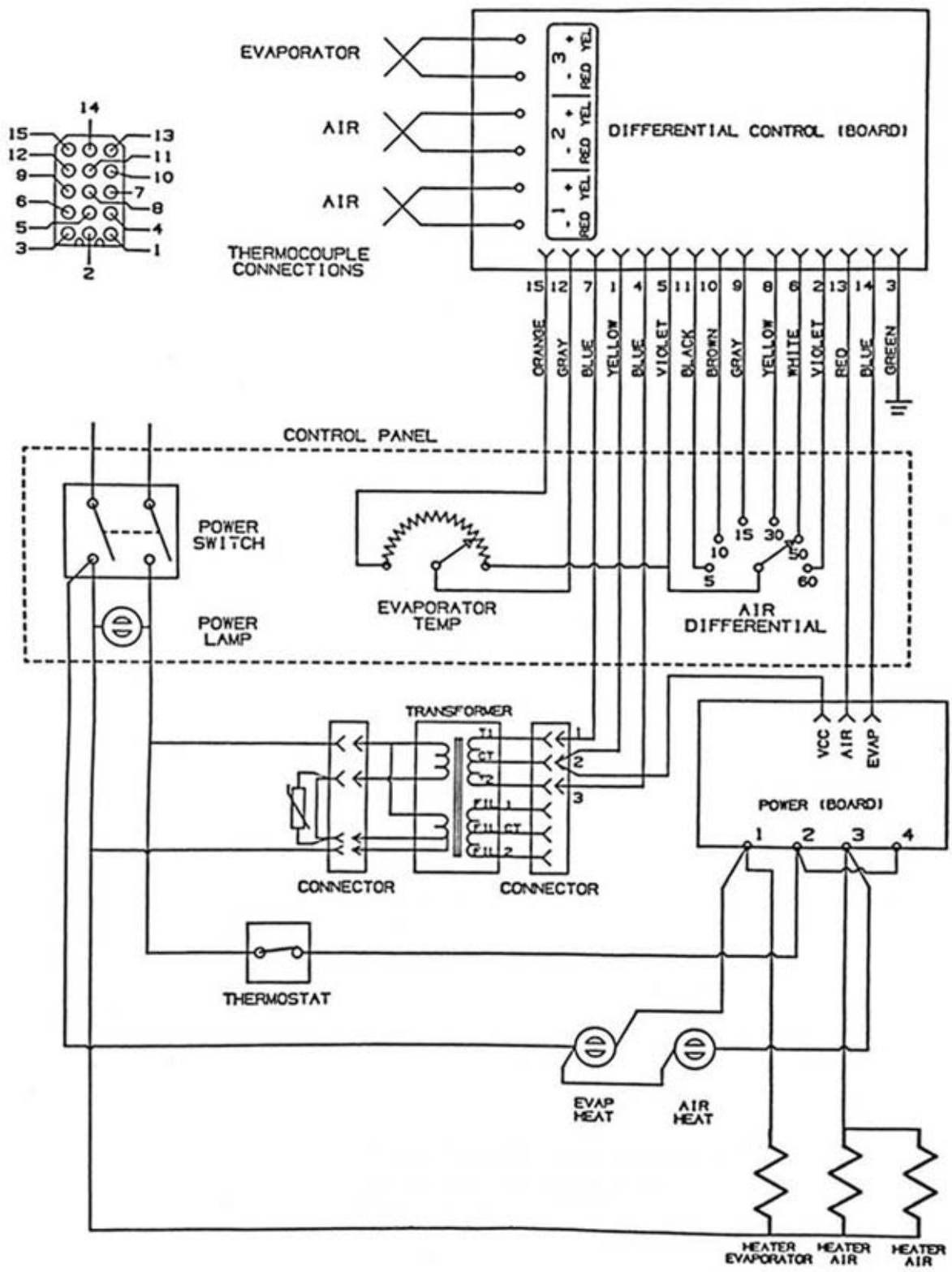
DANGER: Electrical and high temperature hazards may be encountered during equipment servicing.

SYMPTOMS	FAULTS
No power light	1, 2, 3, 4, 23
Food drying out	5, 6, 9, 11, 13, 18, 14, 22, 15
Food excessively moist	7. 8, 10, 12, 19, 14, 21, 15
Food not hot enough	7, 9, 10, 11, 12, 13, 14, 15
Food too hot	6, 8, 14, 18, 19, 15
No heat - air or water (power lamp ON)	27, 20,14, 15
No heat (air)	10, 21, 12, 14, 15
No heat (water)	11, 22, 13, 14, 15
Leaking water	17, 24, 25, 26
Air heaters constantly on	14, 18, 15
Water heater constantly on	14, 19, 15

FAULTS	REMEDIES
	ADJUST / REPAIR / REPLACE
1. Cordset not plugged in	*
2. Circuit breaker tripped	* *
3. Power cord defective	*
4. Power switch defective	*
5. Evaporator tank empty	*
6. Air temperature set too high	*
7. Air temperature set too low	*
8. Water temperature set too high	*
9. Water temperature set too low	*
10. Air heating element(s) defective	*
11. Water heating element defective	*
12. Air heater terminal connection(s) loose	*
13. Water heater terminal connection(s) loose	*
14. Power board defective	*
15. Control board defective	*
16. Control board grounding wire loose or off	*
17. Drip cup O-ring defective	*
18. Air thermocouple defective	*
19. Water thermocouple defective	*
20. Transformer defective	*
21. Air heater terminal on power board loose or off	*
22. Water heater terminal on power board loose or off	*
23. Power light defective	*
24. Float assembly out of calibration (if applicable)	*
25. Needle valve seat defective	*
26. Water line defective	*
27. Series regulating thermostat defective (if applicable)	*

WIRING DIAGRAM

NOTE: Older model cabinets may not employ thermostat, evaporator heater and air heater indicator lamps.



REPLACE CIRCUIT BOARD (ITEM NO. 28)

Tools: Nut Driver - 11/32"; Phillips Screwdriver #2; Slotted Screwdriver - 3/16".

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.

3. Remove the two (2) screws securing power board bracket to escutcheon. Save screws for reuse.

4. Carefully lay power board bracket back from escutcheon (See Figure 1).

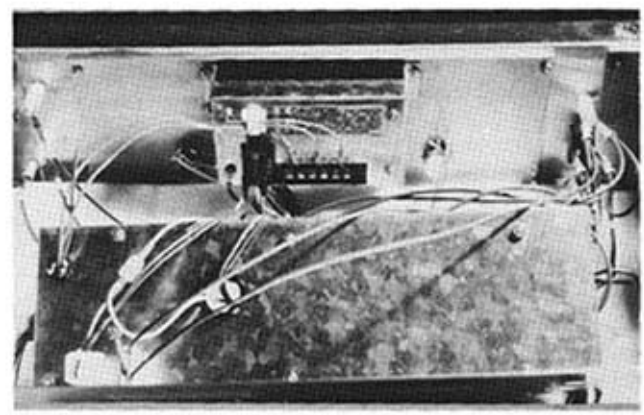


FIG. 1

5. Disconnect wiring harness plug from circuit board.

6. Remove the four (4) hex nuts securing defective circuit board and cover to escutcheon and save for reuse.

   NOTE: If holding cabinet utilizes circuit board referenced in Figure 1A, Step 6 is as follows: Remove the four (4) hex nuts securing faceplate, defective circuit board and cover to escutcheon and save for reuse.

7 Remove hex head screw securing circuit board ground wire to junction box (if applicable) and save for reuse.

   NOTE: Some models do not utilize a junction box. On these models, ground wires are mounted on cabinet side with a phillips screw and two (2) hex nuts. If applicable, remove screw and nuts and save for reuse.

FIG. 1A

8. Replace the four (4) hex nuts securing circuit board and cover to escutcheon.

NOTE: If holding cabinet utilizes circuit board referenced in Figure 1A, Step 8 is as follows: Remove the two (2) screws and nuts securing circuit board assembly together. These screws were utilized for shipping purposes only and are not required for installation of new board assembly. Replace the four (4) hex nuts securing faceplate, circuit board and cover to escutcheon.

9. Replace hex head screw securing circuit board ground wire to junction box (if applicable) or screw and nuts securing ground wire to cabinet side.

10. Transfer the three (3) thermocouples to new circuit board from respective terminals of defective board observing red and yellow terminal connections (See Figure 2).

11. Connect wiring harness plug to circuit board.

12. Replace the two (2) screws securing power board bracket to escutcheon.

13. Replace the six (6) screws securing top to side panels and place unit back into service.

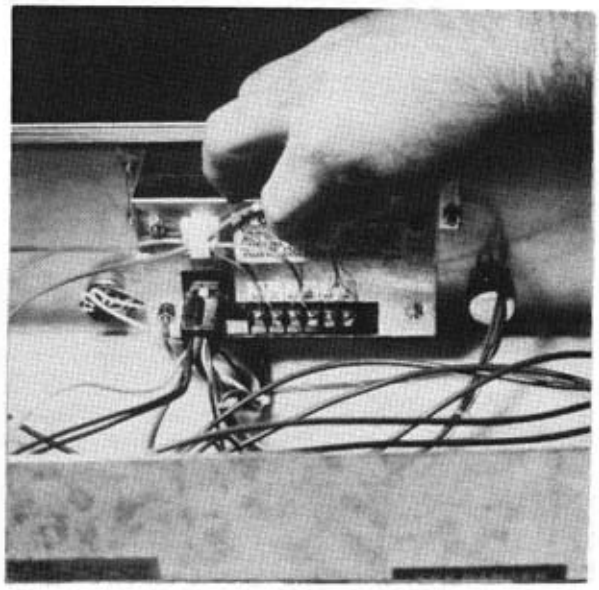


FIG. 2

REPLACE POWER BOARD (ITEM NO. 26)

Tools: Slotted Screwdriver - 1/4"; Phillips Screwdriver #2.

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.

3. Disconnect wiring harness plug from power board.

4. Remove the four (4) screws securing power board to bracket and save for reuse.

5. Move defective power board to side and replace the four (4) screws securing new power board to bracket.

6. IMPORTANT: Transfer wiring to new power board from respective top to bottom terminals of old power board.

7. Connect wiring harness plug to new power board.

8. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE TRANSFORMER (ITEM NO. 22/22A)

Tools: Phillips Screwdriver #2; Slotted Screwdriver - 1/4"; Nut Driver - 11/32".

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.
3. Remove the two (2) screws securing power board bracket to escutcheon and save for reuse.
4. Carefully lay power board bracket back from escutcheon (See Figure 3).
5. Disconnect the two (2) wiring harness plugs from transformer plugs at power board bracket.
6. Remove the two (2) transformer harness plugs from power board bracket.
7. Remove the two (2) screws and nuts securing defective transformer to bracket and save for reuse.
8. Replace the two (2) screws and nuts securing new transformer to bracket.

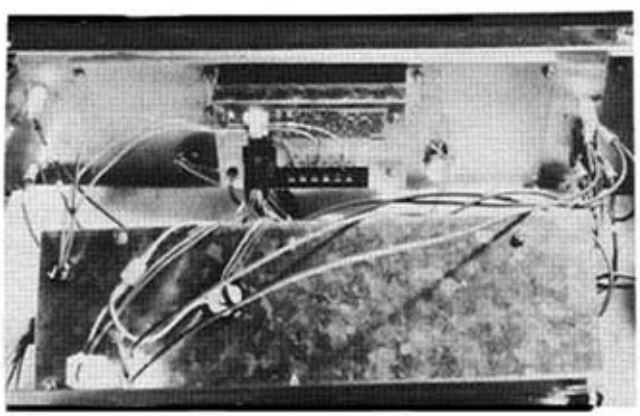


FIG. 3

9. Insert the two (2) transformer harness plugs into power board bracket.
10. Connect the two (2) wiring harness plugs to transformer plugs at power board bracket.
11. Replace the two (2) screws securing power board bracket to escutcheon.
12. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE CIRCUIT BOARD WIRING HARNESS, ROTARY SWITCH AND POTENTIOMETER (ITEM NO. 27)

Tools: Nut Driver - 5/16", 1/2", and 9/16"; Phillips Screwdriver #2; Slotted Screwdriver - 1/8"

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.
3. Remove the two (2) screws securing power board bracket to escutcheon and save for reuse.
4. Carefully lay power board bracket back from escutcheon (See Figure 4).
5. Remove the hex head screw securing circuit board ground wire to junction box (if applicable) and save for reuse.

   NOTE: Some models do not utilize a junction box. On these models, ground wires are mounted on cabinet side with a phillips screw and two (2) hex nuts. If applicable, remove screw and nuts and save for reuse.

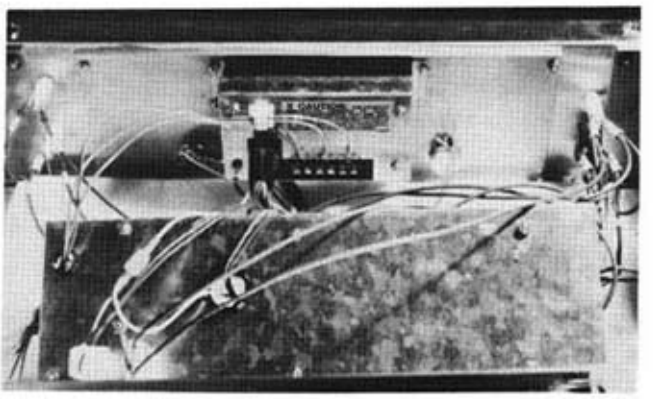


FIG. 4

6. Disconnect old harness plug from circuit board and replace with new harness plug.
7. Disconnect old harness plug from power board and replace with new harness plug.
8. Disconnect old harness plugs from transformer and replace with new harness plugs.

9. Remove knob from evaporator (potentiometer) and air temperature controls (rotary switch) by loosening set screw in side of knob. Save knobs for reuse.

10. Remove hex nut and lock washer from both evaporator and air temperature control and save for reuse.

11. Remove old harness, evaporator and air temperature controls from escutcheon.

12. Install new harness, rotary switch and potentiometer to escutcheon.

13. Replace washers and hex nuts securing evaporator and air temperature controls to escutcheon.

14. Place knobs on evaporator and air temperature controls and secure by tightening set screws.

15. Replace the hex head screw securing harness ground wires to junction box (if applicable) or screw and nuts securing ground wires to cabinet side.

16. Replace the two (2) screws securing power board bracket to escutcheon.

17. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE AIR THERMOCOUPLE PROBE ASSEMBLY

(ITEM NO. 29)

Tools: Phillips Screwdriver #2; Slotted Screwdriver - 1/4"; Nut Driver - 3/8"; Knife; Nylon String.

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.

3. Remove the two (2) screws securing power board bracket to escutcheon and save for reuse.

4. Carefully lay power board bracket back from escutcheon (See Figure 5).

5. Disconnect faulty air thermocouple #1 or #2 whichever applicable, from circuit board.

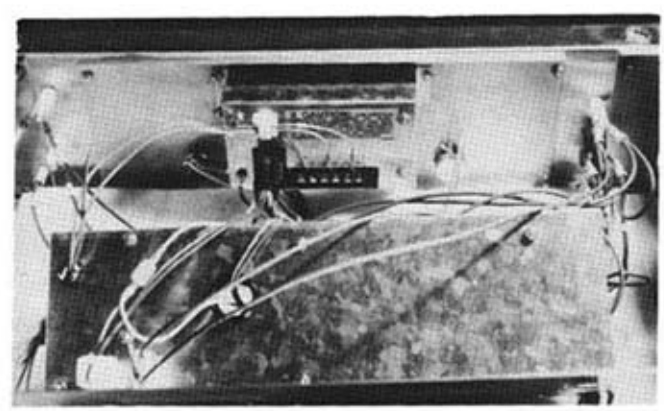


FIG. 5

6. Remove the two screws securing access plate to side of cabinet, (#1 thermocouple probe assembly is behind bottom access plate and #2 assembly behind top). Save screws and plate for reuse.
7. Cut out a plug of insulation gaining access to probe assembly. Save insulation for reuse.
8. Remove the two (2) hex nuts securing probe bracket to cabinet side and save for reuse.
9. Securely tie a thin nylon cord to the circuit board end of the defective thermocouple wire.
10. Remove probe and bracket from cabinet side (See Figure 6).
11. Carefully pull thermocouple wire down through cabinet side. When wire is completely pulled through, remove cord from old thermocouple leaving cord in place.
12. Remove defective probe assembly from bracket.
13. Insert new probe assembly into bracket and replace the two (2) hex nuts securing bracket to cabinet side.
14. At access hole location, securely tie cord to circuit board end of new thermocouple wire.

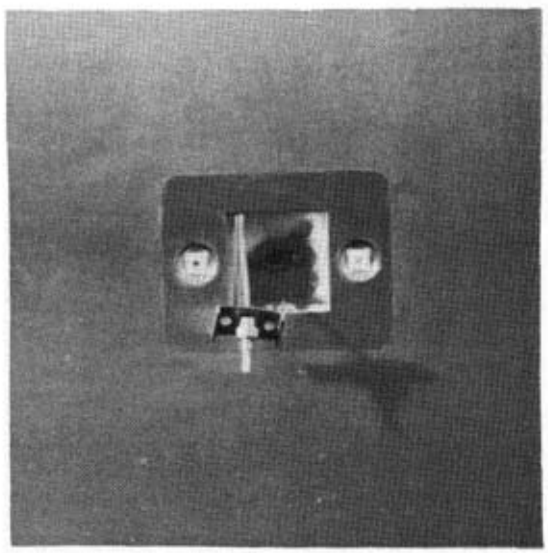


FIG. 6

15. From top of cabinet, carefully pull nylon cord up through cabinet side until new thermocouple wire is completely pulled through.
16. Remove nylon cord from thermocouple wire and observing red and yellow terminal connections, connect thermocouple wires to circuit board.
17. Place cut piece of insulation over probe assembly.
18. Replace the two (2) screws securing access plate to cabinet side.
19. Replace the two (2) screws securing power board bracket to escutcheon.
20. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE EVAPORATOR THERMOCOUPLE (ITEM NO. 30)

Tools: Phillips Screwdriver #2; Slotted Screwdriver - 1/4"; Nut Driver - 5/16" and 7/16".

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.

3. Pad floor to protect cabinet side from scratches. Lay cabinet on side.

4. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet and save for reuse.

5. Remove the hex nut securing insulation and bracket to tank bottom. Save nut, bracket and insulation piece for reuse (See Figure 7).

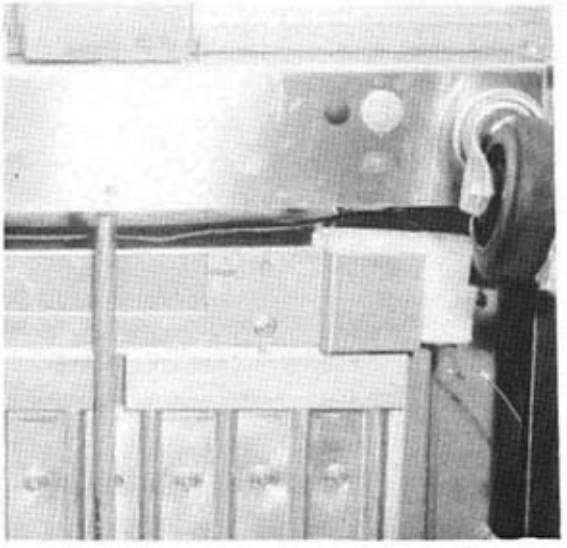


FIG. 7

6. Remove hex nut securing thermocouple ring from stud on tank.

7. Remove the two (2) screws securing power board bracket to escutcheon.

8. Carefully lay power board bracket back from escutcheon (See Figure 8).

9. Disconnect defective evaporator thermocouple #3 from circuit board.

10. Securely tie a thin nylon cord to circuit board end of defective thermocouple wire.

11. From bottom of cabinet, carefully pull defective thermocouple wire down through cabinet side. When wire is completely pulled through, remove nylon cord from defective thermocouple wire leaving cord in place.

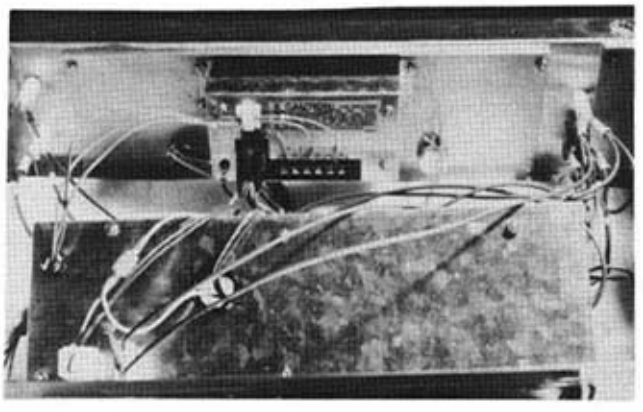


FIG. 8

12. Replace the hex nut securing new thermocouple ring to stud on tank.

13. Securely tie a nylon cord to the circuit board end of the thermocouple wire.

14. From top of cabinet, carefully pull nylon cord up through cabinet side until new thermocouple wire is completely pulled through.

15. Remove nylon cord from thermocouple wire and observing red and yellow terminal connections, connect thermocouple wires to circuit board (See Figure 9).

16. Replace the two (2) screws securing power board bracket to escutcheon.

17. Replace the hex nut securing bracket and insulation to stud on tank.

18. Replace the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.

19. Return cabinet to upright position.

20. Replace the six (6) screws securing top to side panels and place unit back into service.

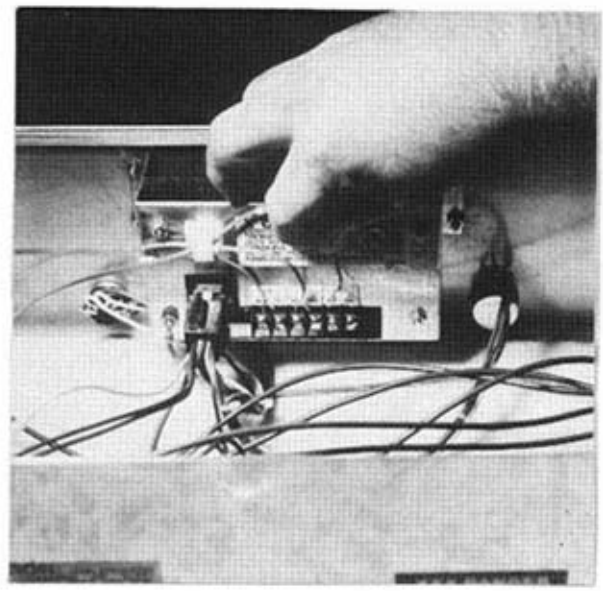


FIG. 9

REPLACE ON/OFF SWITCH (ITEM NO. 31)

Tools: Nut Driver - 5/8"; Phillips Screwdriver #2.

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.

3. Remove the hex nut and switch guard securing ON/OFF switch to escutcheon. Without disconnecting wiring, move switch to side. Save switch guard for reuse.

4. Install knurled face nut on new ON/OFF switch. Replace the hex nut and switch guard securing switch to escutcheon. IMPORTANT: Transfer wires to new switch from respective left to right terminals of old switch.

5. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE POWER CORD (ITEM NO. 24)

Tools: Slotted Screwdriver - 1/4"; Phillips Screwdriver #2, Nut Driver - 5/16"; Standard Pliers.

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.

3. Remove the two (2) wire connectors securing power cord wires and extension wires inside junction box (if applicable) and save for reuse.

   NOTE: Some models do not utilize a junction box. On these models power cord ground wire is mounted along with harness ground wires via a phillips screw and two (2) hex nuts to cabinet side if applicable, remove screw and nuts and save for reuse.

4. Remove the hex head screw securing power cord and harness ground wires to junction box (if applicable).

5. Compress and remove power cord strain relief. Remove defective power cord. Save strain relief for reuse.

6. Insert new power cord through hole in rear escutcheon and replace hex head screw securing power cord and harness ground wires to junction box or screw and two (2) nuts securing ground wires to cabinet side.

   NOTE: To ensure proper connection in Step 7, insulation on extension wires should be stripped back 1/2".

7. Replace the two (2) wire connectors securing power cord wires to extension wires.

8. Replace strain relief securing new power cord to rear escutcheon.

9. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE INDICATOR LAMP (ITEM NO. 1A, 12A, 13A)

Tools: Slotted Screwdriver - 3/16"; Phillips Screwdriver #2.

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.
3. Remove the two (2) wires from defective indicator lamp.

   NOTE: Some models utilize only one (1) indicator lamp indicating when ON/OFF switch in ON. Other models utilize three (3) lamps. One indicating when ON/OFF switch is ON, one (1) when water heater is on and one (1) when air heaters are on.
4. Using flathead screwdriver, depress spring loaded holding ears while pushing lamp through escutcheon to remove.
5. Push new indicator lamp through escutcheon until retaining ears open securing lamp in place.
6. Attach wires to new indicator lamp.
7. Replace the six (6) screws securing top to side panels and place unit back into service.

REPLACE NEEDLE VALVE SEAT (ITEM NO. 34)

Tools: N/A

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.
2. Loosen the two (2) wing nuts securing float cover to float assembly. Remove float cover and save for reuse.
3. Remove float arm pivot rod releasing float arm and bulb from float assembly and save for reuse.
4. Remove needle valve and seat from valve body.
5. Remove defective rubber seat from needle valve and replace with new rubber seat.
6. Place needle valve and seat down in valve body.
7. Replace float arm pivot rod securing float arm and bulb to float assembly.
8. Position float cover in place and secure by tightening wing nuts. Place unit back into service.

REPLACE FLOAT BULB (ITEM NO. 36)

Tools: Phillips Screwdriver #2; Food Grade Silicone Sealant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Loosen the two (2) wing nuts securing float cover to float assembly. Remove float cover and save for reuse.

3. Remove float arm pivot rod releasing float arm and bulb. Save rod for reuse.

4. Remove screw securing defective float bulb to float arm.

5. Apply food grade silicone sealant to screw hole in new float bulb.

6. Replace screw securing new float bulb to float arm.

7. Replace float arm pivot rod securing float arm and bulb to float assembly.

8. Position float cover in place and secure by tightening wing nuts. Place unit back into service.

REPLACE FLOAT ASSEMBLY (ITEM NO. 20)

Tools: Phillips Screwdriver #2; Open End Wrench - 9/16"; Nut Driver - 5/16"

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial number 14877 and above are manually filled.

2. Loosen the two (2) wing nuts securing float cover to float assembly. Remove float cover.

3. Remove float arm pivot rod releasing float arm and bulb from float assembly.

4. Remove the two (2) screws or nuts (depending on design) securing valve body to cabinet base.

5. **CAUTION:** Carefully lift float valve body upward until water line is visible (See Figure 10).

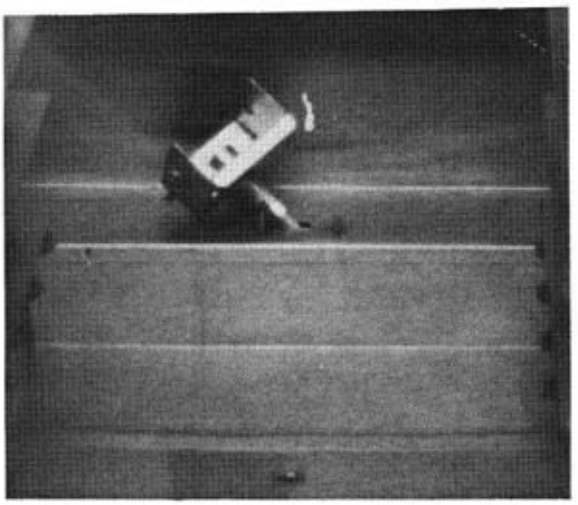


FIG. 10

6. Holding water line secure, remove compression nut securing water line to valve body. SECURE WATER LINE IN PLACE.

7. Remove bushing from defective float assembly.

8. Loosen the two (2) wing nuts securing float cover to new float assembly. Remove float cover and save for reuse.

9. Remove float arm pivot rod freeing float arm and bulb from new float assembly.

10. Remove needle valve and seat from new valve body.

11. Apply thread sealant to threads, insert and secure bushing to new float assembly.

CAUTION: Utilize care when handling water line in Step 12 not to damage or kink causing potential leakage problems.

12. Secure water line compression nut to bushing of new valve body.

13. Replace the two (2) screws or nuts (depending on design) securing new valve body to cabinet base.

14. Place needle valve and seat down in valve body.

15. Replace float arm pivot rod securing float arm and bulb to valve body.

16. Position float cover in place and secure by tightening wing nuts.

NOTE: Calibration of new float assembly is required prior to placing unit back into service. Follow calibration procedure below.

FLOAT ASSEMBLY CALIBRATION PROCEDURE

Tool: Allen Wrench - 5/64"

Procedure:

1. Adjust Allen screw on front of float arm assembly allowing approximately 1/8" clearance between float bulb and bottom of evaporator base.

NOTE: Float arm Allen screw sets amount of water flow entering the cabinet.

2. Turn on water supply to cabinet.

3. When water level in cabinet is approximately 5/8" below overflow level in drip cup, HOLDING FLOAT ARM SECURE IN PRESENT POSITION and applying minimum pressure downwards, adjust Allen screw on top of float arm assembly clockwise until water flow ceases to cabinet.

4. Position cover in place and secure by tightening the two (2) wing nuts. Place unit back into service.

REPLACE MECHANICAL LATCH AND CATCH (ITEM NO. 6A)

Tools: Slotted Screwdriver - 1/4"; Phillips Screwdriver #2; Allen Wrench - 5/64"; Food Grade Silicone Sealant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel and remove insulation. Save insulation and screws for reuse (See Figure 11).

3. Remove the three (3) screws, nuts, nut channel and shim (if applicable - see note) securing defective latch to outer door panel and save for reuse (See Figure 12).

   NOTE: Some units utilized shims located between latch and door.

4. Replace the three (3) screws, nuts, nut channel and shim (if applicable) securing new latch to outer door panel.

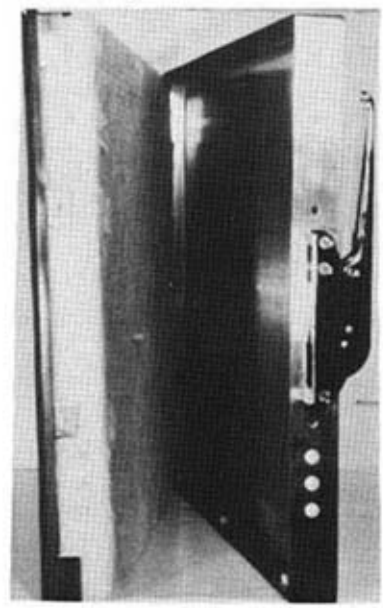


FIG 11

5. Remove the three (3) screws securing defective catch to cabinet.

   NOTE: Place aluminum shim behind catch with grooved sides interlocking prior to Step 6.

6. Replace the three (3) screws securing new catch to cabinet.

7. Insert insulation and replace the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel.

   NOTE: Step 8 does not apply to top door on CB53 model cabinets.

8. Apply silicone sealant to bottom of door where inner and outer door panels join providing a moisture resistant barrier.

9. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

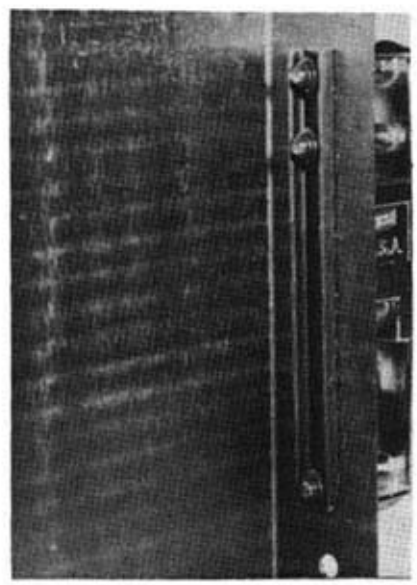


FIG 12

REPLACE MECHANICAL DOOR HINGE (ITEM NO. 10A)

Tools: Phillips Screwdriver #2; Food Grade Silicone Sealant; Thread Locking Bondant

Procedure:

1. Turn off electrical power; disconnect electrical power supply; disconnect water supply (if applicable); drain; and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove the two (2) hinge covers and save for reuse.

   CAUTION: Utilize care in preventing door from falling when removing screws in Step 3.

3. Remove the six (6) screws securing hinges to cabinet side and save for reuse. Remove door.

4. Remove the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel and remove insulation. Save screws and insulation for reuse (See Figure 13).

   NOTE: On CG15 models it may be necessary to loosen the six (6) screws securing hinges to door to permit access to two (2) of the screws. Save screws for reuse.

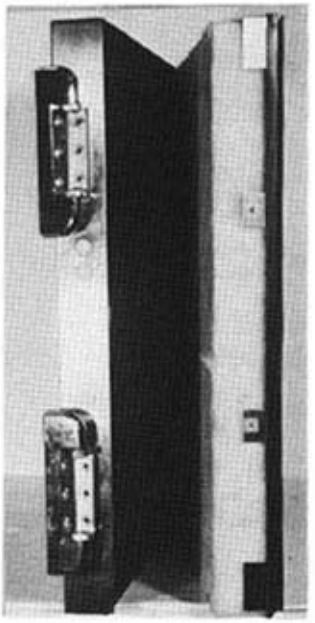


FIG. 13

5. Remove the three (3) screws, nuts, nut channel and shim (if applicable - see note) securing defective hinge to door and save for reuse (See Figure 14).

   NOTE: Some models utilized shims located between hinge and door. Mount hinge with lower edge facing inward toward door prior to Step 6.

6. Apply thread locking bondant (non-permanent type) to the three (3) screws and replace along with nuts, nut channel and shim (if applicable) securing new hinge to door. DO NOT COMPLETELY TIGHTEN SCREWS ON CG15 MODELS ONLY.

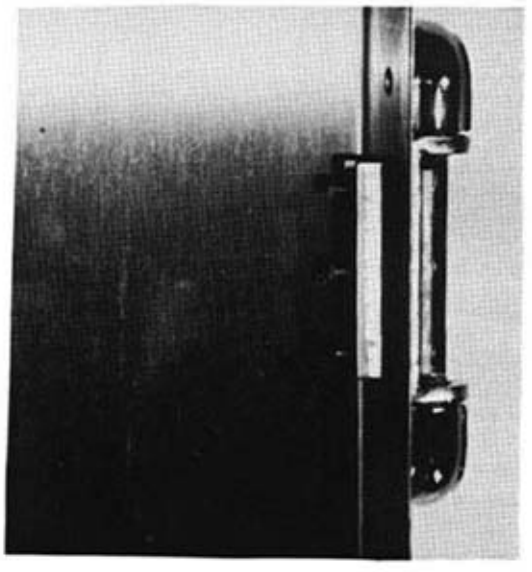


FIG 14

7. Insert insulation and replace the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel.

8. (CG15 MODELS ONLY) Tighten the three (3) screws securing hinge to door.

9. Replace the six (6) screws securing door to cabinet.

   NOTE: Step 10 does not apply to top door on CB53 model cabinets.

10. Apply silicone sealant to bottom of door where inner and outer door panels join providing a moisture resistant barrier.

11. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

REPLACE MAGNETIC LATCH AND MAGNET PLATE

(ITEM NO. 6)

Tools: Slotted Screwdriver - 1/4"; Phillips Screwdriver #2, Food Grade Silicone Sealant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow unit to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Open door and lift upward removing door from cabinet.

3. Remove the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel and remove insulation. Save screws and insulation for reuse (See Figure 15).

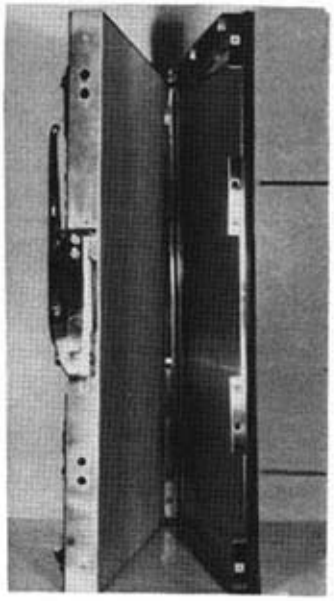


FIG. 15

4. Remove the four (4) screws, nuts and nut channel securing defective latch to outer door panel (See Figure 16).

5. Replace the four (4) screws, nuts and nut plate securing new latch to outer door panel.

6. Remove the two (2) screws securing defective magnet plate to cabinet.

7. Replace the two (2) screws securing new magnet plate to cabinet.

   NOTE: Step 8 does not apply to top door on CB53 model cabinets.

8. Apply a food grade silicone sealant along bottom of door where inner and outer door panels join providing a moisture resistant barrier.

9. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

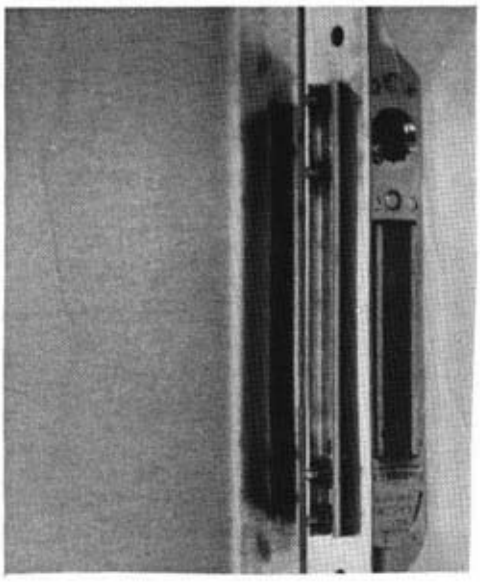


FIG. 16

REPLACE SELF CLOSING DOOR HINGE (ITEM NO. 10)

Tools: Slotted Screwdriver - 1/4"; Phillips Screwdriver #2; Food Grade Silicone Sealant; Thread Locking Bondant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove hinge cover from door hinge.

3. Open door and lift upward removing door from cabinet.

4. Remove the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel and remove insulation. Save screws and insulation for reuse (See Figure 17).

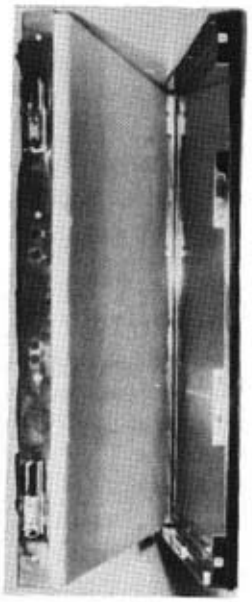


FIG. 17

5. Remove the two (2) screws, nuts and nut channels securing hinge half to outer door panel and save for reuse (See Figure 18).

6. Replace the two (2) screws, nut channel and nuts securing new hinge half to outer door panel.

7. Insert insulation and replace the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel.

   NOTE: Step 8 does not apply to top door on CB53 model cabinets.

8. Apply a food grade silicone sealant along bottom of door where inner and outer door panels join providing a moisture resistant barrier.

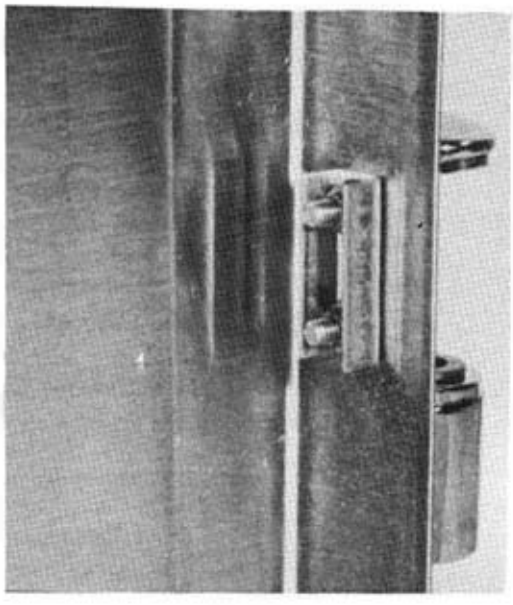


FIG. 18

9. Remove the two (2) screws securing defective hinge half to cabinet and lift upwards to remove.

   NOTE: Leave support screw in place. DO NOT REMOVE.

10. Place new hinge half over support screw and slide down into position.

11. Apply thread locking bondant (non-permanent type) to the two (2) screws and replace securing new hinge half to cabinet.

12. Replace door on cabinet.

13. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

REPLACE DOOR GASKET (ITEM NO. 17)

Tools: Phillips Screwdriver #2; Food Grade Silicone Sealant

Procedure:

1. Turn off electrical power; disconnect electrical power supply; disconnect water supply (if applicable); drain; and allow unit to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel and remove insulation. Save screws and insulation for reuse (See Figure 19).

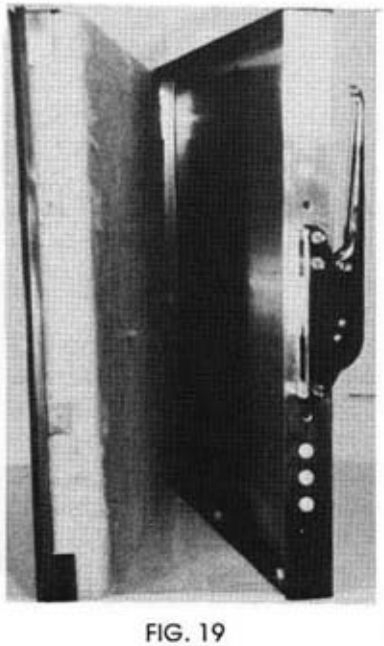


FIG. 19

3. Remove defective gasket from mounting slots in inner door panel.

4. Utilizing care in preventing new gasket from obtaining cuts along edges, insert gasket in mounting groove in inner door panel (See Figure 20).

5. Insert insulation and replace the eight (8) screws (CC16 models), 10 screws (CG15 and CB21 models), or 14 screws (CB53 models) securing inner door panel to outer door panel.

   NOTE: Step 6 does not apply to top doors on CB53 model cabinets.

6. Apply silicone sealant to bottom of door where inner and outer door panels join providing a moisture resistant barrier.

7. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

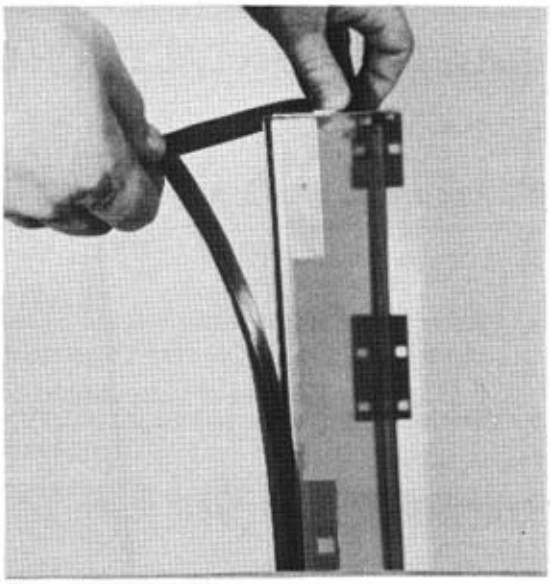


FIG. 20

DOOR GASKET ADJUSTMENT

Tools: Allen Wrench - 5/64"; Phillips Screwdriver #2

Procedures:

NOTE:

Door adjustment should be such that the gasket will seize a 1" wide strip of bond paper throughout the entire length of the gasket. Adjustments to both sides of door may be required to obtain proper seal.

'ADJUST MECHANICAL DOOR CATCH'

NOTE: On mechanical latch and catch assemblies, gasket seal adjustments are made to catch only. Latches are not adjustable.

1. Loosen Allen screw WITHOUT completely removing.

2. Once loosened, turn door catch one full turn CLOCKWISE to tighten seal or COUNTER CLOCKWISE to loosen.

3. Tighten Allen screw until end is recessed in catch.

4. Proceed to 'ADJUST MECHANICAL DOOR HINGES'.

'ADJUST MECHANICAL DOOR HINGES'

1. Close door.
2. Remove the two (2) hinge covers and save for reuse.
3. Loosen but DO NOT REMOVE the six (6) screws securing hinges to door.
4. Move hinge side of door toward cabinet (tightening seal), or away from cabinet (loosening seal) and tighten the six (6) screws securing hinges to door.
5. Replace hinge covers and place unit back into service.

'MAGNETIC LATCH'

NOTE: Catches utilized on magnetic latch style doors cannot be adjusted. Latches are to be adjusted to vary seal.

1. Loosen but DO NOT REMOVE the four (4) screws securing latch to door enough to allow latch movement.
2. Move latch forward on door to loosen seal or backwards to tighten seal and tighten the four (4) screws securing latch to door.
3. Proceed to 'ADJUST MAGNETIC DOOR HINGE'

'ADJUST MAGNETIC DOOR HINGES'

1. Close door.
2. Remove the two (2) hinge covers and save for reuse.
3. Loosen but DO NOT REMOVE the four (4) screws securing hinges to door.
4. Move hinge side of door toward cabinet (tighten seal), or away from cabinet (loosen seal) and tighten the four (4) screws securing hinges to door.
5. Replace hinge covers and place unit back into service.

REPLACE DOOR ASSEMBLY (Mechanical Latch) (ITEM NO. 5A)

Tools: Slotted Screwdriver - 1/4"; Phillips Screwdriver #2 ; Thread Locking Bondant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove the two (2) hinge covers from hinges.

CAUTION: Utilize care in preventing door from falling when removing screws in Step 3.

3. Remove the six (6) screws securing defective door to cabinet.
4. Apply thread locking bondant (non-permanent type) to the six (6) screws and replace securing new door to cabinet.
5. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

REPLACE DOOR ASSEMBLY (Magnetic Latch) (ITEM NO. 5)

Tools: Phillips Screwdriver #2; Thread Locking Bondant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Open door and lift upward removing defective door from cabinet.
3. Remove the four (4) screws securing hinge halves to cabinet and lift upwards to remove.

   NOTE: Leave support screws in place. DO NOT REMOVE.

4. Place new hinge halves over support screws and slide down into position.
5. Apply thread locking bondant to the four (4) screws and replace securing new hinge halves to cabinet.
6. Mount new door on hinge.
7. Perform 'DOOR GASKET ADJUSTMENT' prior to placing unit back into service.

REPLACE CASTER (ITEM NO. 8, 16)

Tools: Rubber Mallet; Pry Bar

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove wing nuts securing shelf racks to cabinet side and save for reuse. Remove shelf racks.
3. Pad floor to protect cabinet from scratches. Lay cabinet on side.
4. Pry defective caster from leg using pry bar.
5. Insert new caster in leg and secure using rubber mallet.
6. Return cabinet to upright position.
7. Replace wing nuts securing shelf racks to cabinet sides and place unit back into service.

REPLACE EVAPORATOR HEATER (ITEM NO. 32, 32A)

Tools: Nut Driver - 5/16", 7/16"; Standard Pliers; Open End Wrench - 3/8".

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove wing nuts securing shelf racks to cabinet side and save for reuse. Remove shelf racks.
3. Pad floor to protect cabinet from scratches. Lay cabinet on side.
4. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet and save for reuse.
5. Remove drip cup and save for reuse.
6. Remove drain pipe and save for reuse.
7. Remove the 16 nuts securing the three (3) heater shields, insulation and bracket in place. Remove defective heater. Save nuts, heater shields, insulation and bracket for reuse.
8. Utilizing care, hold heater end behind wire terminal and remove hex nut (both heater ends) (See Figure 21).

   NOTE: Verify washers are on new heater terminals prior to Step 9.

9. Transfer heater wires to new heater from respective terminals of defective heater.

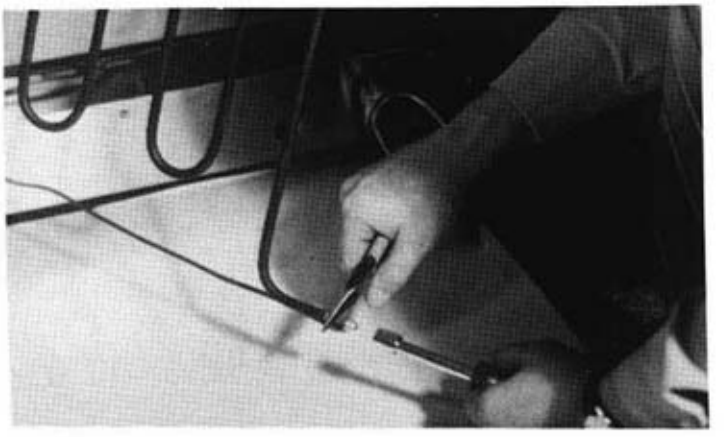


FIG. 21

10. Utilizing care, holding heater end behind wire terminal and replace hex nut securing heater wire and washer to terminal (both heater ends).
11. Replace the 16 nuts securing new heater, heater shields, insulation and bracket in place.
12. Appply teflon tape to threads of new drain pipe and secure to block on evaporator tank.
13. Replace the six (6) hex head bolts and washers securing galvanized panel to bottom of cabinet.
14. Return cabinet to upright position.
15. Place drip cup on drain pipe and lower bail securing in place.
16. Replace the wing nuts securing shelf racks to cabinet sides and place unit back into service.

REPLACE AIR HEATER (ITEM NO. 21, 21A)

Tools: Nut Driver - 5/16", 3/8"; Standard Pliers; Open End Wrench - 9/16"

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove wing nuts securing shelf racks to cabinet sides and save for reuse. Remove shelf racks.
3. Remove the two (2) hex nuts securing heater holder to side panel and save for reuse.
4. Pad floor to protect cabinet from scratches. Lay cabinet on side.
5. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet and save for reuse.

   NOTE: Mark heater wire location prior to Step 6 to ensure proper connection to new heater.

6. Utilizing care, hold heater behind wire terminal and remove hex nut (both heater ends) (See Figure 22).
7. Remove the two (2) compression nuts securing heater to bushings and save for reuse.

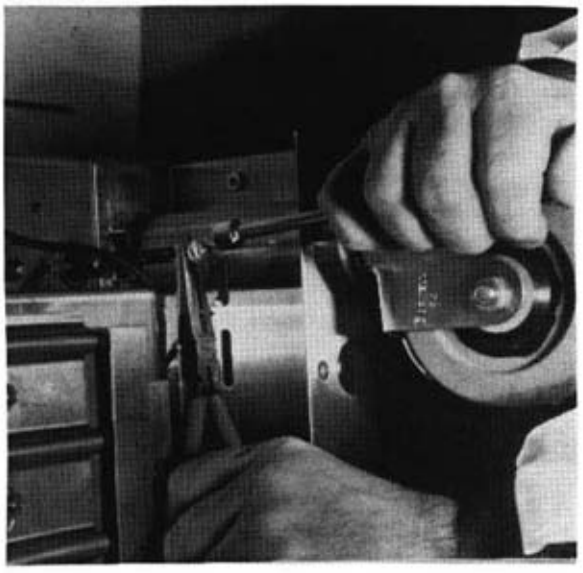


FIG. 22

8. From inside of cabinet, tap heaters downward allowing ferrule to unseat from bushing on bottom of base assembly (See Figure 23).

9. Remove the two (2) ferrules (one on each heater) with wire cutters.

10. Remove heater by pulling upward from inside of cabinet.

    NOTE: When installing new heater, top of loop should be 1-3/4" above tank top. This should allow 1/4" clearance between top of heater loop and bottom of shelf rack.

11. Insert new heater through heater holes allowing clearance stated in note above.

12. Place new ferrules on heater and replace the two (2) compression nuts securing heater to bushings.

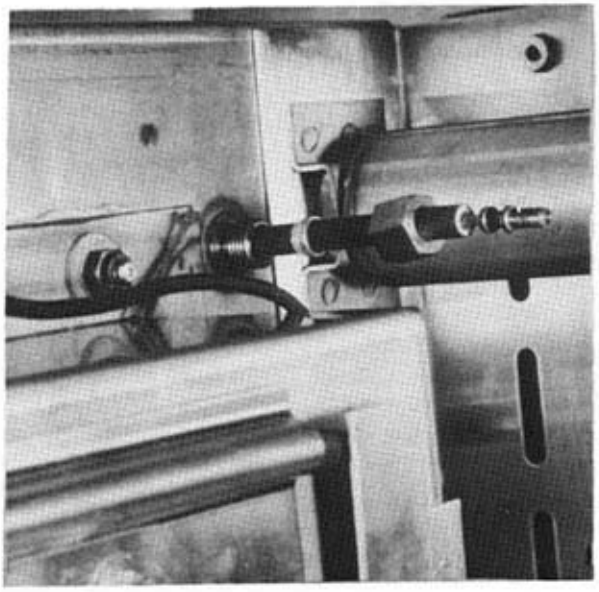


FIG. 23

    NOTE: Verify washers are on new heater terminals prior to Step 13.

13. Observing wire location markings, place heater wires on new heater.

14. Utilizing care, hold heater behind wire terminal and replace the two (2) hex nuts securing heater wire and washer to terminal (both heater ends).

15. Replace the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.

16. Return cabinet to its upright position.

17. Replace the two (2) hex nuts securing heater holders to cabinet side.

18. Replace wing nuts securing shelf racks to side panels and place unit back into service.

REPLACE WATER INLET FITTING (ITEM NO. 14)

Tools: Open End Wrench - 9/16"; Phillips Screwdriver #2 , Teflon Tape

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove water inlet elbow from fitting and save for reuse.

3. Remove wing nuts securing shelf racks to cabinet sides and save for reuse. Remove shelf racks.

4. Pad floor to protect cabinet from scratches. Lay cabinet on side.
5. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet and save for reuse.
6. Remove the two (2) screws and nuts securing defective water inlet fitting to rear of cabinet and save for reuse.
7. Pull plastic water line out of fitting.
8. Seat O-ring in groove on new water inlet fitting.
9. Push plastic water line into new water inlet fitting.
10. Replace the two (2) screws and nuts securing new water inlet fitting to rear of cabinet.
11. Apply teflon tape to threads of water inlet elbow.

CAUTION: Utilize care in Step 12 not to overtorque elbow during replacement causing fitting to crack.

12. Carefully thread and secure water inlet elbow into fitting.
13. Replace the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.
14. Return unit to upright position.
15. Replace wing nuts securing shelf racks to cabinet sides and place unit back into service.

REPLACE WATER INLET ELBOW (ITEM NO. 15)

Tools: Open End Wrench - 9/16"; Teflon Tape

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove defective water inlet elbow from water inlet fitting.
3. Apply teflon tape to threads of new water inlet elbow.

CAUTION: Utilize care in Step 4 not to overtorque elbow during replacement causing fitting to crack.

4. Carefully thread and secure new elbow into fitting and place unit back into service.

REPLACE WATER LINE (ITEM NO. 35)

Tools: Open End Wrench - 1/2", 9/16; Nut Driver - 5/16", 3/8"; Phillips Screwdriver #2

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove wing nuts securing shelf racks to cabinet sides and save for reuse. Remove shelf racks.
3. Loosen the two (2) wing nuts securing float cover to float assembly and remove cover.
4. Remove float arm pivot rod freeing float arm and bulb from float assembly and save for reuse.
5. Remove needle valve and seat and and save for reuse.
6. Remove the two (2) screws or nuts (depending upon design) securing valve body to cabinet base and save for reuse.
7. Pad floor to protect cabinet from scratches. Lay cabinet on side.
8. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet and save for reuse.
9. Remove the two (2) screws and nuts securing water inlet fitting to rear of cabinet. Save screws, nuts, O-ring and fitting for reuse.
10. Pull water line out of fitting.
11. From inside of cabinet, pull valve body upwards removing valve body and defective water line.
12. Remove compression nut securing defective water line to bushing and save for reuse.

    NOTE: Verify brass ferrule is placed on water line in front of compression nut prior to Step 13.

13. Place compression nut on new water line and secure to bushing in valve body.
14. Replace the two (2) screws securing valve body to cabinet base.
15. Seat O-ring in groove on water inlet fitting.

    NOTE: Verify brass insert is inserted in water line prior to Step 16.

16. Insert water line through hole in rear of cabinet and into water inlet fitting.
17. Replace the two (2) screws and nuts securing water inlet fitting to rear of cabinet.
18. Replace the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.

19. Return unit to its upright position.
20. Place needle valve and seat into valve body.
21. Replace float arm pivot rod securing float arm and bulb to valve body.
22. Position float cover in place and secure by tightening the two (2) wing nuts.
23. Replace wing nuts securing shelf racks to cabinet sides and place unit back into service.

REPLACE DRIP CUP (ITEM NO. 7)

Tools: N/A

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Lift bail and remove defective drip cup.

   NOTE: Verify O-ring is seated on drain pipe prior to Step 3.

3. Place new drip cup onto drain pipe and secure by lowering bail. Place unit back into service.

REPLACE DRAIN PIPE O-RING (ITEM NO. 34)

Tools: N/A

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Lift bail and remove drip cup.
3. Remove defective O-ring from drain pipe.
4. Place new O-ring into groove on drain pipe and lubricate.
5. Replace drip cup and secure by lowering bail. Place unit back into service.

REPLACE DRAIN PIPE (ITEM NO. 33)

Tools: Vise Grips; Teflon Tape; Nut Driver - 5/16"

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Lift bail and remove drip cup.
3. Remove wing nuts securing shelf racks to cabinet sides and save for reuse. Remove shelf racks.
4. Pad floor to protect cabinet from scratches. Lay cabinet on side.
5. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.
6. Remove defective drain pipe from block on evaporator tank.
7. Apply teflon tape to threads of new drain pipe.
8. Secure new drain pipe to block on evaporator tank.
9. Replace the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.
10. Return cabinet to upright position.

    NOTE: Verify new O-ring is on new drain pipe and lubricate prior to Step 11.

11. Place drip cup onto drain pipe and secure by lowering bail.
12. Replace wing nuts securing shelf racks to cabinet sides and place unit back into service.

REPLACE SERIES REGULATING THERMOSTAT (ITEM NO. 23)

Tools: Phillips Screwdriver #2; Nylon String; Nut Driver - 5/16", 7/16"; Food Grade Silicone Sealant

Procedure:

1. Turn off electrical power, disconnect electrical power supply, disconnect water supply (if applicable), drain and allow to cool.

   NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

2. Remove the six (6) screws securing top to side panels and remove top. Save screws for reuse.
3. Remove wing nuts securing shelf racks to cabinet sides and save for reuse. Remove shelf racks.
4. Remove self-locking nut or wing nut (depending on design) securing thermostat bulb cover to cabinet side and save for reuse. Remove cover from thermostat bulb.
5. Remove the two (2) hex nuts securing capillary tube retaining plate to cabinet base and save for reuse. Remove plate.
6. Pad floor to protect cabinet from scratches. Lay cabinet on side.
7. Remove the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet and save for reuse.
8. Push thermostat bulb and capillary tube down through access hole in base.
9. Secure nylon string to thermostat bulb.
10. From top of cabinet, carefully pull thermostat capillary tube up through cabinet side until bulb and nylon string are visible.
11. Remove the two (2) screws securing thermostat body to mounting bracket. DO NOT REMOVE wires at this time.
12. Remove screw securing thermostat shaft locking arm in place and remove arm. Save locking arm and screw for reuse.
13. Replace the two (2) screws securing new thermostat body to mounting bracket.
14. Slide locking arm down onto thermostat shaft.
15. Replace screw securing locking arm to thermostat mounting bracket.
16. Transfer wires to new thermostat from respective terminals of defective thermostat.
17. Remove string from defective thermostat bulb and secure to bulb of new thermostat. String should be secured to both the top and tip of bulb to ensure proper routing down through cabinet side.

CAUTION: Utilize care in preventing capillary tube from obtaining kinks when performing Step 18.

18. Uncoil capillary tube of new thermostat until straight.
19. From bottom of cabinet, carefully pull thermostat bulb and capillary tube down through cabinet side until bulb is completely pulled through.
20. Push bulb and approximately 2" of capillary tube up through access hole in base.
21. Replace the six (6) hex head screws and washers securing galvanized panel to bottom of cabinet.
22. Return cabinet to upright position.

23. Slide bulb cover down over thermostat bulb.

24. Replace self-locking nut or wing nut (depending on design) securing thermostat bulb and cover to cabinet side.

25. Apply a food grade silicone sealant around thermostat bulb access hole in base.

    NOTE: Position capillary tube under groove in retaining plate when performing Step 25.

26. Replace the two (2) hex nuts securing capillary tube retaining plate to cabinet base.

27. Replace wing nuts securing shelf racks to cabinet sides and place unit back into service.

COMPONENT REPLACEMENT TEST PROCEDURE

The following procedure is meant to be used as an aid in troubleshooting and in the check-out of equipment after repairs are made.

_____ 1. Turn ON/OFF switch OFF and the evaporator temperature and air temperature knobs counter clockwise to their lowest setting.

_____ 2. Connect to water supply (if applicable) and 120 volt 60 Hertz power supply (see note). Shelf racks must be in place.

NOTE: Holding cabinets with serial numbers prior to 14877 utilized an automatic water fill float system. Cabinets with serial numbers 14877 and above are manually filled.

_____ 3. Turn on water supply (if applicable). Observe the following: all of the water should enter tank at rear of cabinet without side spray. Water should shut off no less than 1/2" from overflow.

_____ 4. Observing back of unit, no leakage at valve, or other fittings. Drip cup must not leak.

_____ 5. Position temperature measuring device in the air as close to the center of the cabinet as possible.

_____ 6. Switch ON/OFF switch ON. Red power lamp must be on.

_____ 7. Set evaporator control knob to 120 degree setting.

_____ 8. Set air control knob to +5 degree setting.

_____ 9. Both white, air and evaporator, heat on lamps must be on full. AS AIR AND EVAPORATOR TEMPERATURE APPROACH THE CONTROL SETTING THE LAMPS WILL START TO FLICKER AND FINALLY GO COMPLETELY OUT.

_____10. For model numbers ending with SE the following will be true. With ON/OFF switch ON, power lamp on, total current should be 18.0 amps. Current may vary between 16.2 and 19.8 amps.

For model numbers ending with SK the following will be true. With ON/OFF switch ON, power lamp on, total current should be 10.9 amps. Current may vary between 9.8 and 12.0 amps.

_____11. Monitor the amp meter for when the air heaters cycle off. At this time the air temperture should read 125 degrees Fahrenheit + or - 5 degrees.

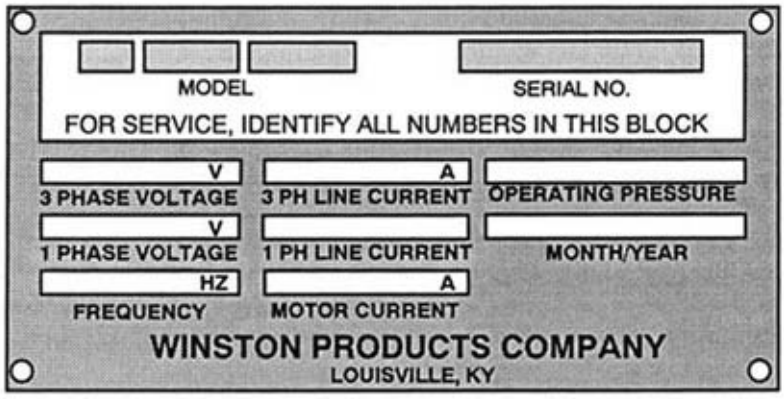
_____12. Move the temperature measuring device to the evaporator tank. Close door before continuing.

_____13. Monitor the amp meter for when the evaporator heater cycles off. At this time the evaporator temperature should read 120 degrees Fahrenheit + or - 5 degrees.

_____14. Door gasket must seal at top and at both sides such that a one inch wide strip of bond paper 0.006 inches thick is seized by the gasket.

OBTAINING SERVICE

ALWAYS REFER TO THE MODEL NUMBER AND SERIAL NUMBER WHEN REQUIRING SERVICE OR WHEN PLACING A PARTS ORDER.



Use only genuine Winston Products replacement parts in your appliance. Refer to the parts identification section of this manual to identify the part(s) needed.

PROCEDURES FOR REPLACING NEW COMPONENTS ARE INCLUDED IN THIS MANUAL. FOLLOW THOSE INSTRUCTIONS CAREFULLY.

To order parts or obtain other information, contact:

WINSTON PRODUCTS COMPANY
2345 Carton Drive
Louisville, Kentucky 40299
(502) 495-5400

Customer Service (800) 234-5286

Winston CVAP Brand
Cook & Hold Cabinet - CA75 Series

Parts Identification Manual

WINSTON PRODUCTS CO.
2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

Lit. #4275R82 - 9/96

WINSTON CVAP BRAND COOK & HOLD CABINET

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WINSTON CVAP BRAND COOK & HOLD CABINET

Parts Identification

NOTE: See page 5 - 6 for Parts Descriptions and Order Numbers

To order parts, contact your Winston representative or call the International office:

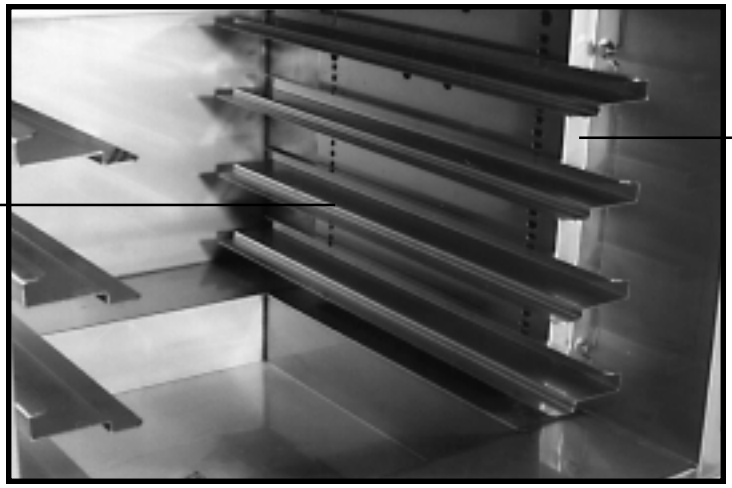
Winston Products Co.

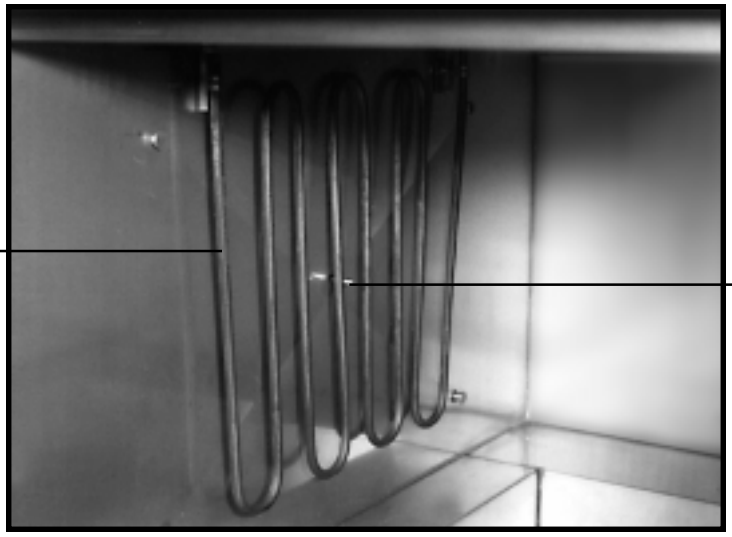
(800) 234-5286 USA & Canada/USA TEL: (502) 495-5400/USA FAX: (502) 495-5458

WINSTON CVAP BRAND COOK & HOLD CABINET

Parts Identification

NOTE: See page 5 - 6 for Parts Descriptions and Order Numbers

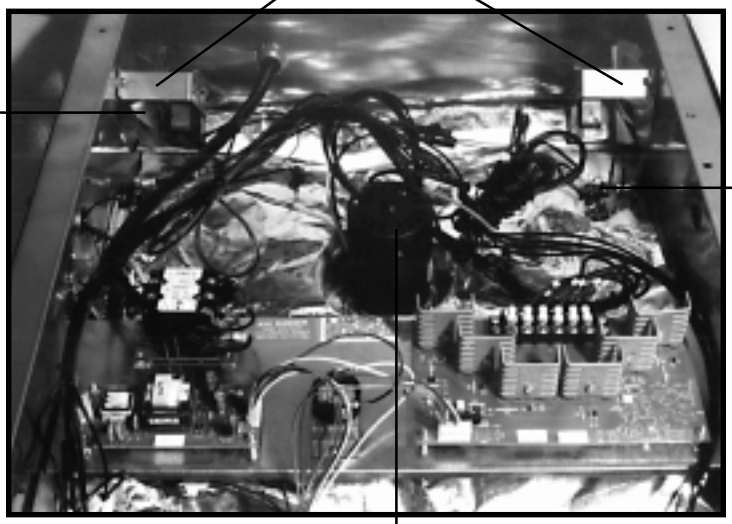




WINSTON CVAP BRAND COOK & HOLD CABINET

Parts Identification

NOTE: See page 5 - 6 for Parts Descriptions and Order Numbers



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WINSTON CVAP BRAND COOK & HOLD CABINET

Parts Identification

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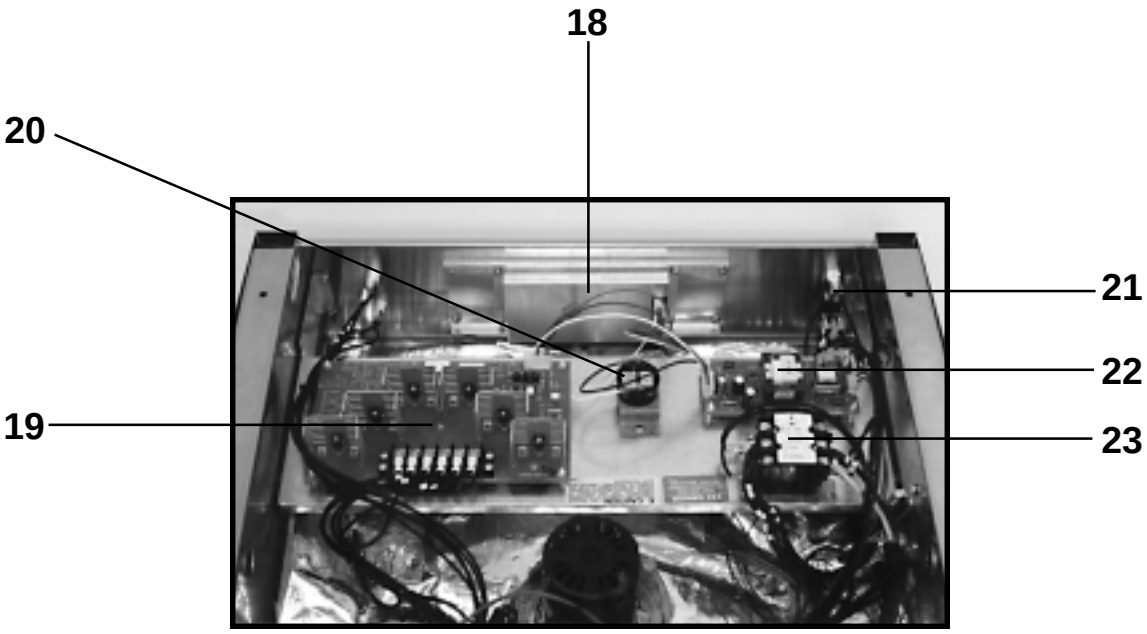

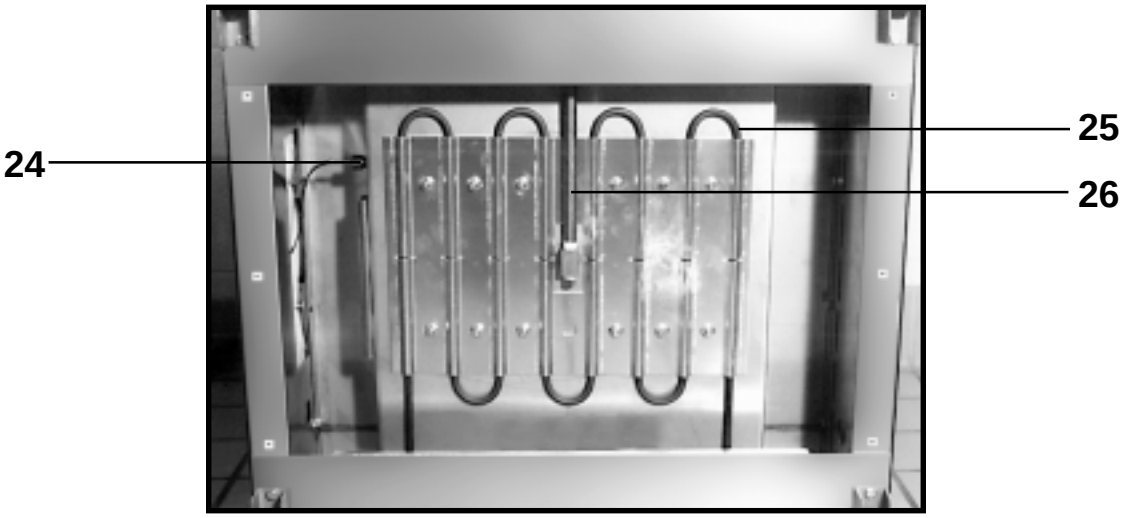

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WINSTON CVAP BRAND COOK & HOLD CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
1	Magnetic Door Latch	HPS1774
2	Door Hinge	HPS2116
3	Drip Cup	HPS2182
4	Wire Retainer	HPS2054
5	Caster - 3" Locking *(Front)* Caster - 3" Non-Locking *(Rear)*	HPS2146 HPS2147
6	Universal Rail	HPS2094
7	Shelf Rack Assembly	*Ref. Only*
8	Air Heater *(208 Volt)* Air Heater *(240 Volt)*	HPS2174 HPS2175
9	Air Probe	HPS2178
10	Power On Lamp	HPS1012/1
11	On/Off Switch Guard	HPS1086
12	Hi Limit Lamp	HPS1012/1
13	Water Fill Lamp	HPS1012/1
14	Cooling Fan Blades	HPS2083
15	Cooling Fan Motors	HPS2098

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WINSTON CVAP BRAND COOK & HOLD CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
16	High Limit Thermostat	HPS2199
17	Blower Motor	HPS2100
18	Main Board - GM *(1 Channel)*	HPS2238
	Main Board - GM *(6 Channel)*	HPS2239
19	Power Board	HPS2173
20	Buzzer	HPS1586
21	On/Off Switch	HPS1529
22	Transformer Board	HPS2172
23	Electro-Mechanical Relay	HPS1007
24	Water Thermocouple	HPS2177
25	Water Heater *(208 Volt)*	HPS2174
	Water Heater *(240 Volt)*	HPS2175
26	Drain Pipe	HPS1629

NOTE: See pages 1 - 4 for Photo Reference

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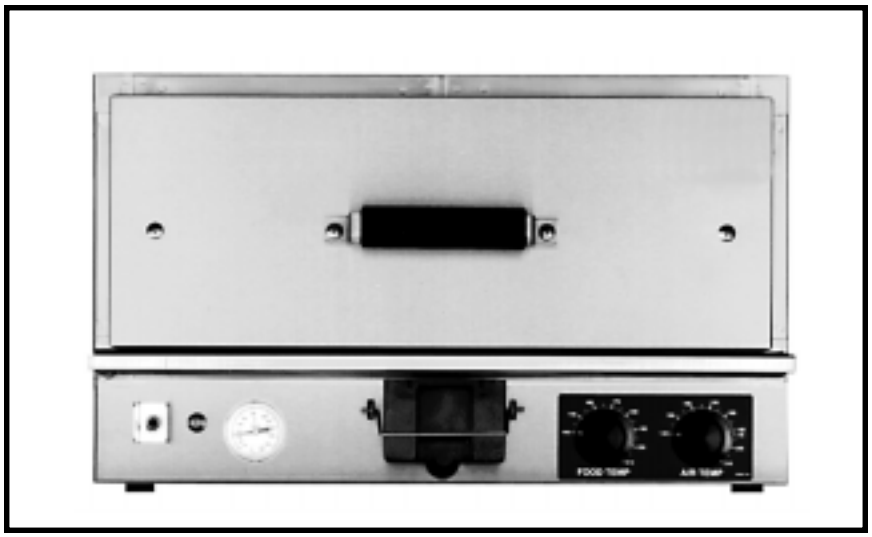
Winston CVAP Brand Drawer Cabinet

Parts Identification Manual

HB35D



WINSTON PRODUCTS CO.

2345 Carton Drive
Louisville, KY 40299 USA
(800) 234-5286
(502) 495-5400

Lit. #4275R81 - 7/01

WINSTON CVAP BRAND DRAWER CABINET

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WINSTON CVAP BRAND DRAWER CABINET

Parts Identification

NOTE: See page 4
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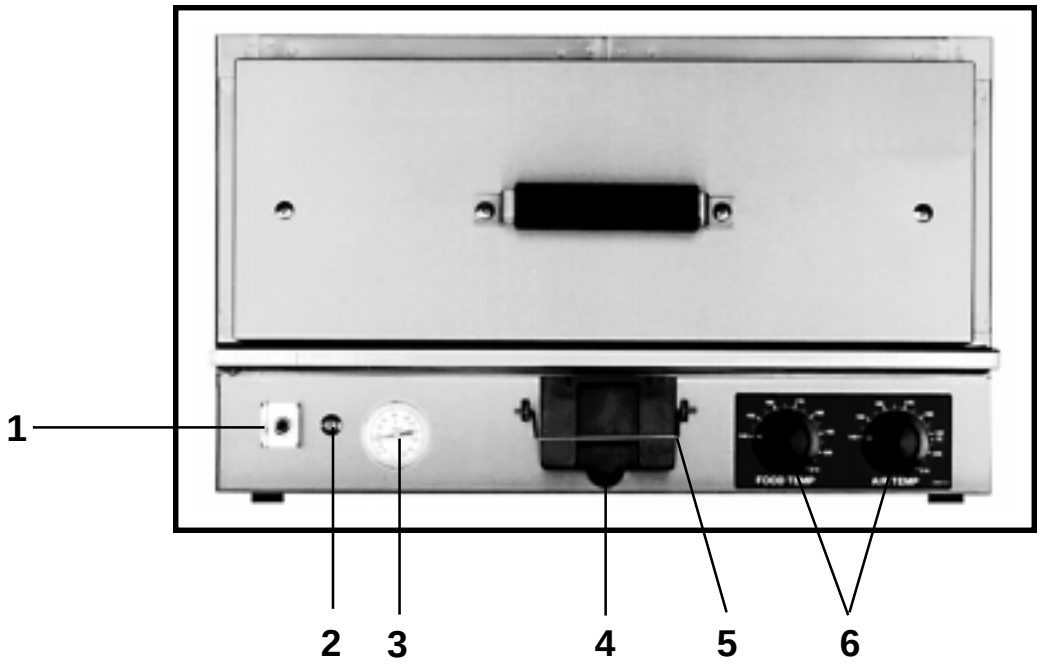

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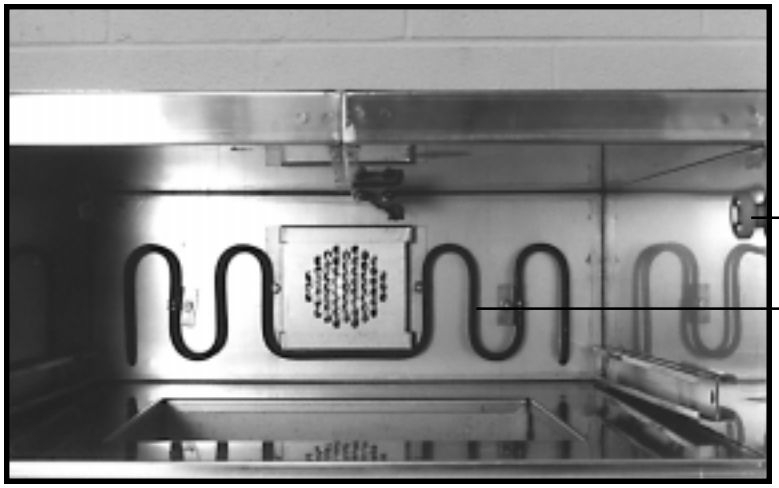

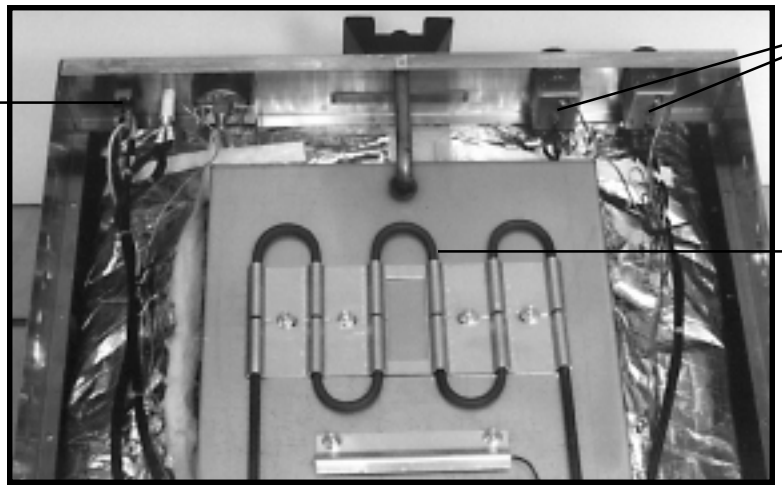

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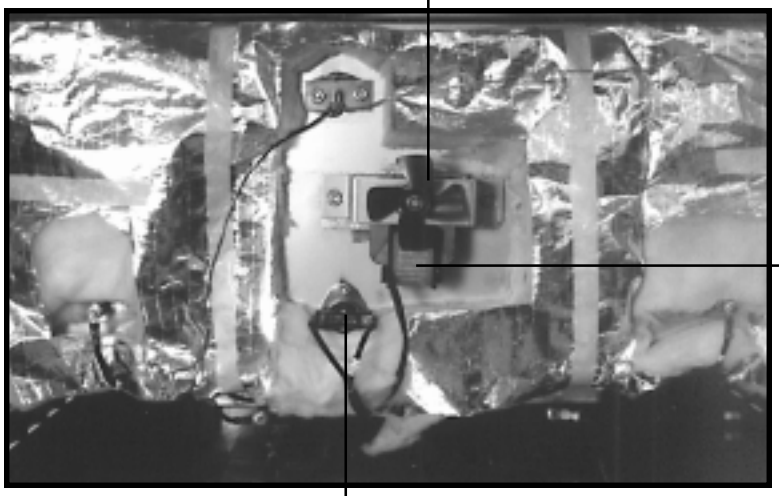

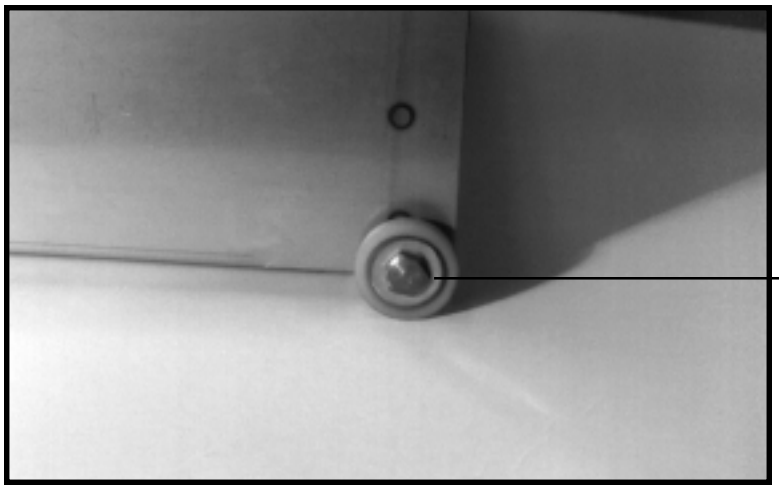

WINSTON CVAP BRAND DRAWER CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
1	On/Off Switch Guard	HPS1086
2	Power On Lamp	HPS1103/3
3	Thermometer	HPS1861
4	Drip Cup	HPS2182
N/A	Drain Cap	PS1654
5	Wire Retainer	HPS2054
6	Black Thermostat Dials	HPS1250
7	Rollers	HPS2181/2
8	Air Heater	HPS2197
9	On/Off Switch	HPS1529
N/A	On/Off Switch	PS2304
10	Air/Water Thermostat	HPS2200
11	Water Heater	HPS2198
12	Fan Blade *(Plastic)*	HPS2188
13	Blower Motor	HPS2196
14	High Limit Thermostat	HPS2199
15	Roller	HPS2181/2
N/A	Gasket Drawer	PS2195

NOTE: See pages 1 - 3 for Photo Reference

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Winston CVAP Brand
Shallow 2 & 3 Drawer Cabinet

Parts Identification Manual

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Louisville, KY 40299 USA
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(502) 495-5400

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WINSTON CVAP BRAND DRAWER CABINET

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WINSTON CVAP BRAND DRAWER CABINET

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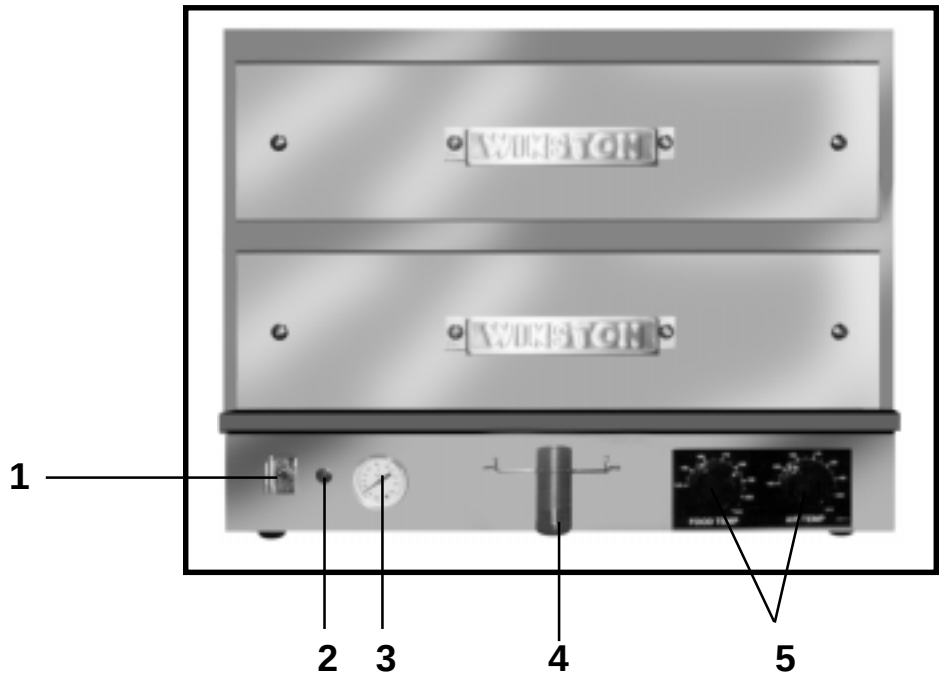

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WINSTON CVAP BRAND DRAWER CABINET

Parts Identification

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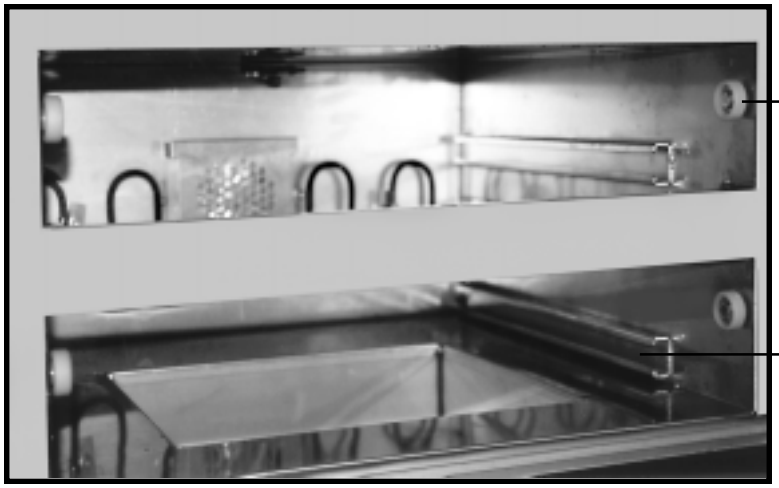

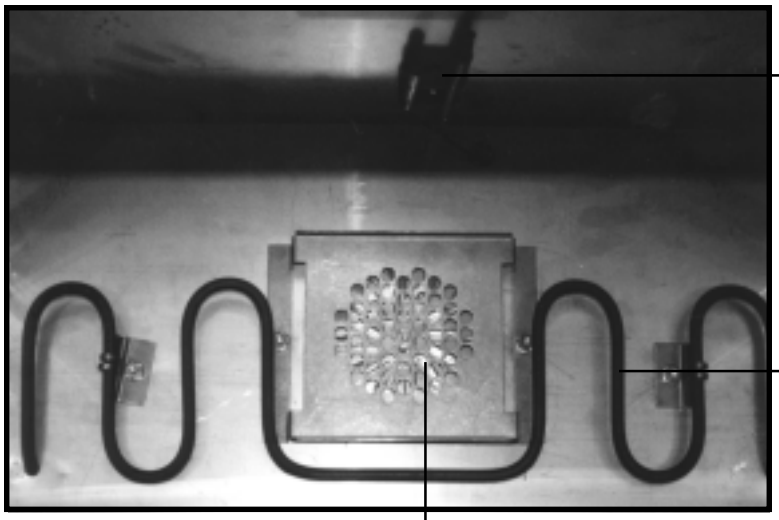

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WINSTON CVAP BRAND DRAWER CABINET
Parts Identification

Photo Reference Number	Part Description	Order Number
1	On/Off Switch Guard	HPS1086
2	Power On Lamp	HPS1103/3
3	Thermometer	HPS1861
4	Drip Cup	HPS2182
5	Black Thermostat Dials	HPS1250
6	Roller Assembly	HPS2181/2
7	Drawer Rail	HPS2227
8	Thermometer & Air Thermostat bulbs	Ref. Only
9	Air Heater	HPS2197
10	Fan Blade *(Aluminum)*	HPS2228
11	Fan Blade *(Plastic)*	HPS2188
12	Blower Motor	HPS2196
13	High Limit Thermostat	HPS2199
14	Air/Water Thermostat	HPS2200
15	Water Heater	HPS2198
16	Power Switch	HPS1529

NOTE: See pages 1 - 3 for Photo Reference

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